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ORIGINAL DEPARTMENT.

COMMUNICATIONS.

TÆNIA.*

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The presence of intestinal worms was known to and described by the very earliest medical and scientific writers. In all probability these parasites were coëval with the advent of man, and possibly were a necessary cotemporary creation. With what we know of them, and have known of them, they keep neck and neck in the race and with the race. Not more than about three varieties of intestinal parasites were known to and described by the ancients. Nor were there but few kinds known before the present century. Our present knowledge of these loathsome parasites places the number of different varieties at about fifty, which take up their habitation in man. Twenty-one of this number pitch their tents in the intestinal canal. Of this apparently large number of tenants, nine of them compose the tape-worm family, seven the round-worm tribe, three are the infusoria, a class which is microscopic, and the suctorial are two in number. It is not improbable that the parasites of the human family may increase as creation and science advance, and the different peoples of the world come within the sphere of research. Not nearly all of this array of worms are peculiar to man; eight only are such—three of the tænia and five of the round-worm tribe. The others are inhabitants of

various animals, and from known and unknown causes, but occasionally getting translated to man, and tarrying, as it were, awhile at Jericho. All ages and sexes are alike disposed to these parasites, and the infant, the adolescent, the middle-aged, and the aged, are subject alike to be the host or hostess of a colony of intestinal parasites. The person who is the host of a single *pediculus humanus*, the fact being known or even suspected, will inevitably be under the ban of social ostracism. But worms are no barrier to good society, and this is a palpable exception to the axiom, "evil associations corrupt good manners." But these are nice distinctions, which, like hairs, divide the N. from the N. W. side. *Omne vivum ex ova*, as all things come from an egg or germ, the necessary condition for the parasitic development is the introduction of eggs or embryos into the intestines. The most rational and common way in which this is effected is by means of the food eaten. Raw or uncooked meat is the most prolific means of introducing the tænia.

The theory of spontaneous evolution, or that certain conditions and substances have a tendency to breed worms, needs not in these days of advancement even a passing notice. The popular belief and parental caution, that sugar-eating children are worm-breeding children, is as fallacious as it is popular. No eggs or embryos, no worms, although the breaths with sweetmeats tainted are. The older writers wrote of a morbus verminosus and a worm disease without the presence of worms. Credulity is rampant. People whose note I would take for any amount, and know that they would pay it at maturity, say

*Read before the Adjunct Montgomery County, Pa., Medical Society.

that under certain geographical and climatic conditions a bushel of sawdust will, in twelve hours, be a bushel of fleas. This is not more incredible than that all saccharine substances will evolve intestinal parasites. *Omne vivum ex ova*. There are many conditions which may be either favorable or hostile to the propagation of the parasites, as disease, personal conditions, occupation, cleanliness, climate, or the season of the year. Diseases which augment the peristaltic motion, are hostile to the incubation or alternation of the eggs, or embryos, which do not get the quiet necessary for their development. As soils are peculiarly fitted to produce in their greatest luxuriance certain grasses, grains, or vegetables, so certain personal conditions may be more favorable than others to produce worms. Occupation is likely to have as much to do with fostering the development of intestinal parasites as any other cause. Butchers and cooks, or those who are engaged in the handling of meats, or animal food, are especially disposed to be the host of the *tænia*—those who are uncultivated in their tastes, who are not over-dainty in what they eat and drink, and how. The axiom, "Not that which goeth into the mouth, but that which cometh out, defileth the man," is not literally or scientifically true. The swallowing of eggs or embryos is absolutely essential to the propagation of intestinal parasites. The belief that new-born children have worms needs to be corroborated by proof. Prof. Robley Dunglison makes the assertion that worms have been met with in the intestines of the fetus in utero. This, if a fact, would be a strong argument against the theory that germs are only received from without.

But if we admit the theory of spontaneous generation to be correct, we will have to admit the generation of endless varieties. Worms have been met with in the eye, in muscular and cellular tissues. The *strongylus gigas*, which ranges in length five inches to three feet, is most generally found in the kidney. Warm climates and warm seasons of the year are more prolific of germ development than are the reverse conditions.

Heller says we are chiefly indebted for a right understanding of the conformation of the *tænia* to the investigations of Steenstrup on the alternation of generation. The tape worm must be looked upon as a colony of animals having an alternation of generation. The so called head is the larva-like nurse; the segments of the worm—the proglottodes—are the animals with sexual organs. From the head, without any mingling of the sexes, are produced the segments by a process of budding. The segments remain joined to

gether for a considerable time; but after they have come to maturity they separate from the rest of the colony. The head is provided with either two or four suckers, and very frequently with a circle of numerous small hooks. By means of this apparatus, it fastens itself on to the mucous membrane of the intestines of its host. As the segments of the chain, the sexual animals, increase their distance from the head by the development and insertion of fresh segments, they become sexually more developed, increasing at the same time in size. They are hermaphroditic, and generate eggs, in which a six-hooked embryo becomes developed. If eggs containing these embryos find entry into the stomach of a suitable animal, their envelopes become softened or undone, and the embryos are set free. By some way or other they leave the digestive canal and make their way to different parts of the body. If they now meet with conditions favorable to their further growth, "nurses" are developed in them. Should these again happen to be introduced into the intestinal tract of another animal, they fasten themselves on, and another tape worm colony becomes developed by budding.

Tænia is a Hebrew word signifying a fillet; hence the name of the worm, from its resemblance to a tape or fillet. A tape worm will be fully developed from the embryo in about two months. The sexual organs are then fully grown, and segments are given off. The worm does not, as erroneously supposed, float its full length along the prime viæ, but lies, coil upon coil, in the digested liquids. It has but very little power of progression or change of position. The worm is not possessed of a digestive tract, but the muscular constructions of the segments suck in their nutritive elements by their expansion and contraction much in the same manner as a hydraulic pump. Each segment is provided with a genital pore, which is seen as a protuberance on the lateral margin of the segment. The genital pore is placed irregularly from side to side, or not alternating regularly.

The three kinds of *tænia* most common in man, are the *tænia solium*, *tænia saginata*, and the *bothriocephalus lata*. The *tænia elliptica* is delicate, and varying in length from 4 to 16 inches, and frequents the dog and the cat. *Tænia flavopunctata* is also quite small, being from 8 to 12 inches long. The head of this species has never been found. The segments in both these kinds are much broader than they are long, or from 2½ to 5 times as broad as they are long. This worm is exceedingly rare, having been found but once

by Weiland. *T. nana* is exceedingly minute, being about $\frac{1}{10}$ of an inch long, the segments being 150 in number, and .018 of an inch broad. *Tænia Madagascarinus* has not been obtained entire, the segments being about five times as long or broad as the *T. nana*. The bothriocephalus lata is the largest of all the tape worms. Its head is about .08 of an inch long, and half as broad. The means by which the eggs or embryos are introduced is somewhat of a mystery, but as the embryos are provided with cilia, and are enabled to live and move about in the water for an indefinite time, it is not improbable that aquatic animals are the favorite nidus of these parasites. Its geographical distribution seems to be confined to limited areas, those areas being along the seas of Northern Europe, where the people subsist largely upon the fish taken in those waters. It is often found in the canine species, as well as in man. The bothriocephalus cordatus is so little known that we will merely enumerate it.

There is no possibility for the development of tænia, except as the embryos are introduced into the stomach by the eating of flesh or articles of diet which have been in contact with infected meat, or the imbibing of fluids in which embryos might be present. I know of no instance where animals other than the carnivora are subject to tænia, except such as are not over-nice or dainty—garbage-rooters, and bone-chewers. The hog or the cow are neither delicate nor æsthetic about the means of gratifying their thirst or appetite. My tænia patients have all been addicted to eating either raw ham or beef, or both. Persons who are in the habit of eating uncooked ham, are those afflicted with the *T. solium*, and those who eat rare beef, or that which has not been sufficiently heated to kill the vitality of the embryos, are as sure to be infested with the *T. sag.* Countries where the custom prevails of devouring the flesh reeking warm, and streaming with the blood, are the classic land of the tænia, and there all are tenanted alike with the tænia. The more that embryos abound in animals the more likely are they to be generated in man. Women are rather oftener subject to tænia than men, for the reason that they are more apt to eat raw meat during their culinary labors. The tænia are generally solitary, but are not antagonistic, for as many as forty have been found in the same person. And more than one species has been found to inhabit the same intestine at the same time. The segments of the *T. sag.* are passed spontaneously, and the *T. solium* very rarely or never. As before mentioned, each segment or proglottodes is

hermaphroditic. The segments of the *T. solium* are more clear, white, and delicate, while the segments of the *T. sag.* are broader, thicker, fatter, and less transparent than the *T. solium*. Some of the segments of the *T. sag.* are quite dark with pigment. The head of the *T. solium* is about the size of a pin head, and is provided with suckers and two circlets of small and large hooks, hence called the armed tænia. The *T. sag.* is about twice the length of the *T. solium*. Its head is much larger than that of the *T. solium*, being about $\frac{1}{10}$ of an inch broad. It also has four sucking discs, but no circlet of hooks, but in place of them a small frontal sucker. Owing to the absence of hooks, the *T. sag.* is called the unarmed tænia. The embryos in the cysticercous condition have been found in the brain, voluntary and involuntary muscles of the ruminants; embryos of the *T.* are not found in the human body, the chances for finding them not being offered. There is no doubt that the embryos of the tænia do exist in the persons who are infested with the animal. The *T. solium* is most common among pork-eating people, and the *T. sag.* in the ruminants, as the cow, calf, giraffe, goat, and sheep. The best measures of prevention or prophylaxis have already been enumerated.

The treatment, successfully, of tænia having been involved in the darkness of obscurity, has called to the front many quacks, or non-professional worm doctors. A patient of mine whom I successfully treated ultimately, was determined to consult a worm doctor, or specialist, in the city (*Kunkle*), as soon as I diagnosed a tape worm. Their fair treatment has brought them the enjoyment of eminent reputations. With good anthelmintics—plenty of deception on the part of the doctor, and credulity on the part of the patient—much satisfaction and many cures are effected. In the cure of tape worm, "*cito, tuto, jucundo*" (*quick, sure, agreeable*) is not absolutely true. It may be quick and sure, but not agreeable, for the remedies are, as a class, nauseating and unpleasant. The physician should be sure that he has expelled the whole worm, as only by this means, or else by a lapse of a few months without a return of expelled segments, can he know if a cure is effected. A cure cannot be by halves; it is complete, or no cure at all. The patient should take but little food for a few hours before beginning the more active treatment. Among the articles most obnoxious to the animal are onions, garlic, and salt herrings. Therefore, let the person partake of unsoaked herring salad and onions a few hours before the use of medicines. A light

meal of bread and coffee just about the time the medicine is taken will make the stomach much more tolerant of the nauseous dose. A cure should only be undertaken when a diagnosis can be made by the presence of the passage of segments. Persons who are suffering from acute febrile diseases, extremes of age, pregnancy, or menstruation, are not good subjects for treatment. Some diseases of the bowels are aggravated by the presence of the animal; and hence, such are cured of the parasite and its provoking disease. The only thing to warrant an attempt at a cure or a re-cure is the passage of segments detached or united. Among the most effectual of the many remedies for the extirpation of *tænia* are brayera anthelmintica or koosso in five-drachm doses, or koossin in thirty-grain doses, the oleo-resin of male fern or filix mas. This is the remedy upon which I have relied, and the one which has brought triumph to my banners. I have given it in half-drachm doses on retiring for the night, which generally brings the result the following day after the administration of a brisk purge. The bark of the pomegranate root has stood the test in the past. Pelletierine, its alkaloid principle is taking no second place as an exterminator of the hated animal. *Rottlera tinctoria*, kameela, benzine, saoria, or fruit of *moesa picta*, oil of turpentine, and picronitrate of potash, have each effected cures, and each have their advocates, as they have been worthy of reliance. One little peculiarity or, perhaps, idiosyncrasy for which I found no fitting place in the body of this essay, is the dislike that a tape worm patient manifests for music. Dr. Eberle, who was cautious in his assertions and philosophical in his deductions, said: "It is stated by authors that persons afflicted with *tænia* become uneasy and ill whenever they hear music, particularly the music of an organ at church. This looks more like a conscience ill at ease than the morbus verminosus."

A patient of mine who was very fond of merri-ment and music, informed me that music had no attractions for him, and that if any one was playing or singing he would go away to where he could not hear it. I introduced this as a specimen of a rare character.

SYPHILITIC RE-INFECTION.*

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GENTLEMEN: I desire to present, on this occa-

*Read before the Southwestern Kentucky Medical Society.

sion, for your consideration, the subject of syphilitic re-infection, which, in my opinion, has not received that attention from the profession it justly merits. Especially is this true of the authors of standard works on venereal diseases. Few of them do so much as to mention the subject. We occasionally, however, meet with a very interesting and valuable article on this subject in some of the periodicals of the day, but these reports are so isolated as to be of little value to the general practitioner. One article appeared in the *Retrospect*, June 20, 1878, and, by the way, one of the best I have ever had the pleasure of reading. This report was from Gaseoyne, Esq., of the Lock Hospital. His remarks are very forcible, and suggest valuable ideas well worthy of careful consideration. Ricord, with his vast clinical experience, never saw a case of re-infection; yet, he does not deny the possibility of it; indeed, he believed in the repetition of chancre. Ashhurst believes the protective influence of syphilis extends through all stages of the disease, so that a second attack of chancre, though possible, is exceedingly rare.

Bumstead and Dunker both fail to give us any light on this subject in their most excellent works, which is the case with all the authors whose books I have at my command.

Certainly it must have been overlooked by these authors, for I feel confident that within their vast experience and observation they have met cases of this kind, but failing to report them in journals, or to refer to them in the books, the medical world is comparatively in ignorance as to valuable facts connected with the subject.

During my brief connection with the profession, and within my limited experience, I have met two cases of re-infection, both of which went through all the evolutions of the disease the second time.

I have no notes of these cases, but being in almost daily communication with the parties, I have sufficient facts to enable me to report correctly.

Case 1. H., a bank clerk, consulted me in the winter of 1871-2, suffering with unmistakable syphilitic lichen, mucous patches on lips and tongue, with throat much inflamed and ulcerated. Inquiry enabled us to glean the following facts: He had had a chancre with enlarged lymphatic gland, followed by fever, restless nights, and an eruption. He had received a course of mercurial vapor baths, and both chancre and eruption disappeared, but lymphitis remained. I at once prescribed $\frac{1}{4}$ gr. hydrarg. proto-iod. to be taken

thrice daily, to be continued a fortnight, when I would change to calomel vapor baths. I touched the mucous patches in the mouth and on the tongue frequently with stick of silver nitrate. While the case proved one of great obstinacy, in less than twelve months all trace of the disease had disappeared. As I was about to leave the country to be absent for some length of time, and not believing the time had come when I could safely discharge him as cured, I commended him to Dr. J. W. Thompson, of our city. I returned in two years and found my patient as I left him, free from any syphilitic manifestations, he not having had any treatment in the meantime.

February 2, 1876—four years since last attack, or rather the disappearance of last attack—this man came to me with a typical chancre just behind the corona. Confrontation was had, and the woman with whom he had been cohabiting had a well defined chancre. In a few weeks this condition was followed by a general malaise and pains in limbs, which continued until a copious eruption, unmistakably syphilitic, appeared all over the body. The inguinal lymphatics of both sides were enlarged, and the post-cervical markedly so. This infection went through all stages of the disease as perfectly as did the first case, but proved much more obstinate; and this slow recovery caused my patient often to become low spirited and indulge in drinking to excess, together with other reckless habits, all of which was detrimental to a speedy cure.

In the fall of the same year, while on a drunken debauch, he so lacerated the penis at the seat of chancre that erysipelatous inflammation set in and rapidly spread over the groins, buttocks, and legs. After this was arrested, he was left in a much emaciated condition, and I advised him to go to Hot Springs, Arkansas, but not to take any medication, but confine himself to the baths and water alone. This advice he carried out, and I believe he is the only patient I ever knew permanently benefited by a visit to these springs.

Case 2. A county official, aged about 30 years, consulted me October 28, 1884, with a sore on his penis, and remarked, "I have a chancre, and want you to kill it before it gets in my blood. I had one once, and let it run until it poisoned my whole system." I examined the sore, and found my patient had made a correct diagnosis of his case. He had enlarged glands in both groins, but the post-cervical were not perceptible. After explaining how useless it would be to canterize the sore, I prescribed proto-iodid. mercury ($\frac{1}{4}$ grain), taken three times daily.

On inquiry, I learned that he was treated for the previous case by Dr. Thompson, of this place, and I have since gleaned the following facts from him connected with the case:

April, 1873, had chancre, with marked lymphatic enlargement, followed by pains in limbs, with restless nights, and soon after by an eruption all over the body, mucous patches and alopecia—all of which yielded kindly to mercury, which was continued for one year.

The symptoms manifested in second attack were ulcerated sore throat, fissured tongue, with mucous patches, and a very extensive alopecia. So great was the falling of hair, that he lost all from the scalp, as well as both lashes and brows. The regular mercurial course had seemingly little or no effect in arresting this attack, and I resorted to the mixed treatment, with the happiest results, all symptoms disappearing in about eight months, and he has since remained well.

In the *Archives of Dermatology*, July, 1877, Dr. Von Vajda has reported a case in a young man only 24 years of age, who had had syphilis three times. This man was presented to the Vienna Medical Society, with remarks from Dr. Von Vajda on syphilitic re-infection.

Geo. Green Gascayne, of the Lock Hospital, had three cases, as follows:

Case 1. November, 1863, a gentleman, twenty-eight years of age, in good health, consulted me for a large typical indurated chancre on corona, with indurated inguinal glands. He was prejudiced against mercury, and would not take it for five or six weeks, when, the chancre having increased to the size of a florin, and showing no disposition to heal, he commenced mercury. In a week the improvement was so marked that all reluctance ceased, and he continued the medicine three or four months, until the induration had quite disappeared. With the exception of a slight sore throat of doubtful character, there were left no constitutional symptoms.

November 16, 1867, he showed me an abrasion with a very suspicious base on the inside of prepuce, which developed into a chancre, inguinal enlargements, etc. The sore healed under mercury, but the induration did not disappear until February.

In May, a large indurated mass formed on frenum, and a similar deposit had taken place on dorsum of penis quite to its root. These indurations yielded kindly to mercury.

October following, a gumma formed on inside of leg, which ulcerated and proved an obstinate sore. Tertiary symptoms appeared in regular

turn, but health otherwise good; but these symptoms recurred the third time. He has since been free from the disease, and has two healthy children.

Case 2. February, 1864. Farmer, robust health, covered with eruptions—roseola and lichen—followed a sore now healed, slight induration remaining. Under mercury, symptoms disappeared and he remained free from disease until November, 1870, when he came with eruptions, roseola and psoriasis, mucous patches of throat, following a sore of one month's standing. The eruption commenced three weeks ago. Under mercury, these symptoms passed away, but he had several relapses of psoriasis, mucous papules of throat and anus, which received treatment at intervals until 1873. He has since continued well.

Case 3. January, 1864. A stout man, twenty-two years old, contracted chancre three months ago, which has healed, has now several mucous patches of throat and fauces, very extensive and persistent, with a fading eruption of roseola; he recovered under mercurial treatment, and remained free from all traces of the disease until May, 1873, when he showed me three indurated chancres on the under side of prepuce, the result of connection about a week since. Each sore was situated on a well-defined induration, and could be picked up between the fingers as a small button-like mass. The inguinal glands were affected. Mercury was given, and on the 24th of June following, the sores were nearly healed, but induration still quite perceptible. I have not heard of him since, though he promised to inform me if anything else occurred.

Case 4. June, 1865. A healthy man, 34 years. General roseola, with universal enlargement of glands, the result of infection probably in August, 1864. There had been great pain and aching of the limbs previous to appearance of the eruption. He had no treatment. In April he had very severe psoriasis of trunk and limbs, followed by iritis and great impairment of health. He continued in a cachectic state, having at intervals double orchitis, ulcers of legs, and nodes, until 1870, since when there have been no visible manifestations of disease; his health, however, has remained much enfeebled, and he has suffered from lung disease, considered to be of syphilitic origin.

February, 1873, a large indurated chancre formed on left thumb; it commenced as a pustule, and was contracted January 24th, from a patient who had a suppurating indurated sore on foreskin, which was followed by roseola. The induration on the thumb was well marked, and the lym-

phatics over the metacarpal bones became swollen, hard, and tender on pressure, but neither epitrochlear nor axillary glands were affected. During March there was much nocturnal aching of legs, but no other symptoms. He had no treatment.

From the *Philadelphia Medical News* of April 5, 1884, the following is from Prof. Newmann: He says, in discussing the important question as to whether syphilis can be acquired more than once, that it has not been witnessed by Barendsprung, Sigmund, and Fournier, but has been met with by Diday, Zeissel, Bumstead, Hutchinson, Lee, and other equally careful and experienced observers. Newmann concludes, after carefully considering this subject, that syphilis rarely occurs but once in the same individual. Yet undoubted cases have been observed. The criteria of reinfection are a clear history of first infection, an initial lesion, enlargement of inguinal glands, and subsequent secondary manifestations. It is well known that a chancre contracted during the time one is laboring under syphilis, is liable to become indurated at the base, so that a hard lesion seated on the genitals, without concomitant adenitis, and the consecutive constitutional symptoms, is not an indication of a second attack.

In conclusion, I will say that there is an opinion prevalent among the people that syphilis is an incurable disease; and that this false impression sprang from members of the medical profession, who, ignorant of both the nature and treatment of the disease, sought to shield under this guise their ignorance, and themselves from censure, should the patient fail to recover under their care, I have not the least doubt.

There is no fact more thoroughly established than that a person suffering with constitutional syphilis cannot be reinfected, and that the immunity thus afforded continues throughout all the stages of the disease. Then, if we have a patient presenting himself with chancre, we are forced to conclude that he has never had syphilis; or that he having had it, has been perfectly cured of the previous infection. Should investigation prove that he has had the disease prior to this, I will venture the affirmation that he has had the benefit of a thorough course of mercury, and at the time he became reinfected he was entirely free from the poisonous influence of the previous attack.

—Dr. R. W. Taylor, *Western Reporter*, claims good results from painting ring-worms twice a day with tincture myrrh, in which four grains of bi-chloride of mercury are added to each ounce.

HOSPITAL REPORTS.

A CLINICAL LECTURE DELIVERED AT THE
HOSPITAL OF THE UNIVERSITY OF
PENNSYLVANIA.

BY WILLIAM PEPPER, M. D., LL. D.,

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Reported by WILLIAM H. MORRISON, M. D.

Diabetes Mellitus; Polyuria.

GENTLEMAN: At the last lecture we considered the subject of diabetes, and I brought before you a patient in an advanced stage of the disease. There are one or two symptoms which were not exemplified in that case, but which will sometimes be met with. These are nervous symptoms of diabetes, the symptoms apparently connected with irritation of the nerves. Among these, one of the most marked is a sense of tingling and numbness complained of in the extremities, particularly in the feet and legs. This is perhaps partly due to defective circulation, but it also seems to be dependent partly upon a condition of the peripheral nerves. It is very like the sensation complained of by patients with spinal congestion or peri-neuritis. I am not sure that any alteration of the peripheral nerves exists, but the symptom is not unlike that complained of in such conditions. As the disease advances this feeling sometimes is a source of great complaint.

Another symptom is extreme irritation of certain parts of the surface, particularly of the orifices, as the vulva in women. Pruritus vulvæ may be among the earliest symptoms of which female diabetics complain. In the same way irritation of the end of the penis and irritation along the course of the urethra will be complained of by male subjects. Itching of the general surface of the skin is not rare. Diabetic eruptions, which may be either of an erythematous or of an eczematous character, are sometimes seen. Add these symptoms which are not so characteristic, to the more characteristic ones, to which I referred at the last lecture, and the history of diabetes is sufficiently complete.

You will remember that I described some of the types which will be met with, and had discussed the question of diet, and when the hour closed was speaking of the drugs which are useful in this affection. Before taking up the subject at this point, let me call attention to the specimens before us.

These were removed from a patient who consulted me some months ago. This lady, the wife of a physician, had a very obscure affection of the liver some three or four years ago. I did not see her at that time. There was violent pain in the region of the liver, occasional vomiting, some fever, and profuse hemorrhages from the bowels. The liver was much enlarged and felt indurated. She was seen at the time by several experienced physicians, who regarded it as a case of carcinoma. It would appear, however, from the excessive pain, the local tenderness, the swelling of the liver, the vomiting, and the moderate fever, to have been simply a case of severe peri-hepatitis. As to

the cause of the hemorrhage in the bowels I am not certain. Her recovery was slow. After the severe symptoms subsided and improvement began, her husband, who first brought her to me seven months ago, stated that she did not pick up as he had expected, and while the appetite was good, she did not gain much in flesh. During the previous year it had been noticed that she was passing too much urine. This did not attract much attention at first, and it was only some time later that sugar was found and the case shown to be one of fully established diabetes. From that time the symptoms were of a most characteristic type. There was progressive loss of flesh, the skin was dry and its secretions scanty, the appetite was strong but capricious, the digestion was rather weak, and there was distress in the epigastrium if the appetite were fully indulged. Thirst was only moderate. There was considerable nervousness and alteration of temperament. The quantity of urine was moderately increased, varying from 90 to 120 ounces. The amount of sugar, however, was very large. The specific gravity averaged about 1040. I was unable to find albumen in any of the cases which I examined.

Having heard this history of severe affection of the liver, with the subsequent development of diabetes, my attention was, of course, especially drawn to the condition of the liver. There was no evidence of marked hepatic disturbance. There had been no spells of pain as from biliary colic. The area of hepatic dullness was somewhat increased, but there was no unusual hardness.

A few days ago I received these specimens and the accompanying note, from which I take the following: "During the few past months she has been about the same, the sugar never diminishing. She lost some in weight, but was able to be about until March 1, when she complained of pain in the neck and side of the head. This was relieved by quinine. On the 3d, she suffered greatly with sickness of the stomach and bilious vomiting. On the 4th and 5th, she was the same. On the 6th, the sickness of stomach was better. The secretion of urine was the same in quantity as it had been for months; the specific gravity was down to 1025. There was a large amount of sugar. On the 7th, she became stupid and very restless, complaining of excessive pain over the region of the liver and stomach and running up to the right arm and shoulder. This pain and soreness had lasted for several days, but had not been so severe. That night the secretion of urine abruptly stopped. From that time the stupid condition gradually deepened, and for the last twelve hours, she was in a condition of profound coma, with decreased respirations until the end."

The case illustrates a point to which I desire to call attention, and that is, the modes in which diabetes may terminate. I have spoken to you of the prognosis, and in doing so, I stated that in general the prognosis was unfavorable as regards final recovery, but that it was favorable as regards prolongation of life. The most favorable cases are those in which the disease comes on in elderly gouty subjects, where there is only a moderate amount of sugar, and where the subjects do not lose weight, but continue well nourished and often fat, despite the presence of sugar in the urine. In ordinary cases, where the disease ap-

pears in middle life, the prognosis would be influenced by the quantity of urine and the quantity of sugar. It would be influenced very greatly by the effect which diet had upon the condition. When a moderate change in the diet produces a marked change in the urine and sugar, the prognosis would be favorable; but when in spite of careful regulation of the diet, the urine remains copious and the sugar abundant, the prognosis would be correspondingly bad. I also told you that the prognosis would be rendered unfavorable by the existence of organic affections, as of the liver, pancreas, or kidneys.

The disease terminates in various ways; sometimes by sheer progressive inanition, sometimes by the development of intercurrent intestinal disease, as diarrhoea. In a considerable number of cases it terminates in the development of phthisis. There is a great tendency to the development of phthisis in this affection, and when developed, it runs its course rapidly, and is not influenced favorably by any remedies. There is no form of phthisis more fatal than that occurring in the course of diabetes. Some cases terminate by gangrene, and it is well known that in diabetes slight injuries are apt to be followed by gangrene. An operation of small magnitude, as the amputation of a toe, may be followed by gangrene of the entire extremity, proving rapidly fatal. In some cases the mode of death is that which is illustrated by the case from which these two specimens were removed, that is, by uræmic or diabetic coma. A patient who has been in fair condition, but usually not doing favorably, suddenly presents a tendency to dullness. The urine is generally diminished in quantity. The dullness deepens into stupor and coma, terminating fatally in the course of twenty-four to forty-eight hours. The cause of this diabetic coma has been closely studied, but no completely satisfactory explanation has been arrived at. It is not improbable that in some of these cases there is, owing to the perverted chemistry of the body, a development of some complicated organic poison which acts as a deadly narcotic. In other cases, the coma may be due to the supervention of uræmia from renal disease. There may also be thrombosis of the cerebral vessels, which may explain the condition.

In this instance there was no post-mortem of the brain. "The liver was found much enlarged, extending from the third rib to an inch and a half below the margin of the ribs. Its weight was three pounds and eleven ounces. The gall-bladder was empty. The vena cava was distended with coagulated blood. The hepatic artery was enlarged sufficiently to permit the introduction of the index finger, and its branches were as large as goose quills; on section, its tissue was found deeply congested. The microscopical examination showed no pathological condition, except cloudy swelling and granular change in the liver cells." The specimen sent was not large enough to enable us to judge of the correctness of the remarkable statement in regard to the distension of the hepatic vessels.

The heart weighed eight ounces. There was an ante-mortem clot attached to the mitral valve, and extending into the pulmonary artery. The spleen was normal.

The kidneys show the presence of parenchymatous desquamative nephritis. They are much enlarged, the left measuring six inches in length. This bears upon the nature of the coma. In many cases diabetic coma is associated with nephritis, either acute or subacute. As I have stated, the urine was free from albumen the last time I examined it, which was several months ago. These kidneys present all the signs of subacute catarrhal nephritis, passing into the chronic stage.

Here then was a case of diabetes where there had been marked alteration in the liver, intense congestion, and severe peri-hepatitis. The diabetes ran its ordinary course, became complicated with nephritis, and terminated with diabetic coma.

Returning now to the treatment of diabetes, we shall consider the remedies to be employed. Every few months a new remedy springs up which is vaunted as a cure, but it soon falls into disuse. It will never be possible to find a remedy that is applicable to all cases, or capable of benefiting all cases, for the reason that diabetes is not one disease, but is merely a symptom of a great variety of diseases—not only of various diseases affecting one organ, but of different organs. Hence it is that there will never be one diet, or one remedy, which will be suitable for all cases of this affection. There are a few remedies which are applicable to a majority of cases. Among the remedies most generally useful are opium and codeia. These are well borne; indeed, there is a peculiar tolerance in diabetes, so that large doses of opium may be given without producing noxious effects. In some cases the greatest benefit in the way of decreasing the quantity of urine, diminishing the frequency of micturition, allaying the nervous irritation, controlling the exaggerated appetite, and lessening the quantity of sugar, will follow the use of these remedies; and when combined with a suitable diet the patient will be greatly improved. Indeed, sometimes there will be permanent improvement under this treatment. Where this is not accomplished, they act as valuable palliatives, and serve to hold the disease in check. In bad cases which are going down hill rapidly, they will afford great comfort and prolong life. They should not be used recklessly nor universally, nor until the most faithful attempts have been made by diet and hygiene. I have dilated upon the importance of diet, but I did not dwell upon the importance of rest, change of residence, change of occupation, and attention to every point of hygiene. When we remember how frequently this affection comes on after over-exertion, anxiety, and depressing causes, you will understand that strict attention to these points is of the first importance, and should be attended to before resorting to the use of any strong drugs.

Again, nearly all these cases require tonic treatment, attention to the digestion, and the use of such remedies as invigorate gastro-hepatic action. Pepsin, pancreatic extract, the mineral acids and the vegetable bitters, particularly nux-vomica and quinia, are often useful when given in some suitable form.

In the next place, most diabetic patients are benefited by the use of mild saline waters. There is perhaps no treatment of diabetes which has

commanded as much favor as the Carlsbad treatment, which consists in careful regulation of the hygiene, a proper diet, fine climate, total absence of business cares, with the free use of a dilute solution of sulphate of soda. Carlsbad water is a mild saline, with scarcely any laxative properties; its chief ingredient is sulphate of soda, and with this there is some chloride and bicarbonate of sodium and the like. This treatment gives admirable results in many cases of diabetes. We can imitate this treatment by exercising sufficient care in regard to the hygienic and dietetic conditions of these patients and recommending the use of some such water. This allays the thirst. There is a great craving for drink in this condition, and you will find that this is a point in the dietetic management which requires a great deal of care. Again, many of these patients require nutrient remedies, such as iron and cod liver oil, and these may be prescribed according to circumstances.

These are all, so to speak, fundamental or general principles. We come next to those special remedies recommended for special conditions. The bromides have been used in large amounts with the idea of obtaining their specific influence over the circulation and nervous system. In some cases they seem to do good, while in others they certainly do harm, and in all cases they must be used with great care.

Ergot has been used for its action upon the nerve centers and upon the walls of the blood vessels, so as to favor contraction of the vessels and thus lessen the excessive secretion of urine. Ergot in some cases of diabetes will greatly reduce the amount of urine, and will lessen, particularly in connection with proper diet, the amount of sugar. In other cases it does no good. It is directed only to this one condition, and has nothing specific in its effect. Salicylic acid and salicylate of sodium have proved useful in some cases. I have seen good results follow their use occasionally. Why, I cannot say. Possibly these were cases where there was a rheumatic or gouty diathesis underlying the diabetes, which was favorably influenced by the salicylates, and thus a good effect was produced upon the other symptoms of the disease. So I might go on and mention some hundreds of remedies which during the past fifteen years have been recommended in the treatment of this disease. The main reliance is to be placed upon hygiene, restriction of diet, and the general measures which I have recommended. In all cases, the treatment is anxious and unsatisfactory, yet with suitable care it is astonishing how long such patients can be sustained. In a considerable number of cases, under suitable regulation of diet, the quantity of sugar has decreased and sometimes entirely disappeared, so that the complete cure of diabetes by prolonged, judicious management, is not to be despair of. You must not regard this condition as simply a subject for vigorous experimentation with drugs. It is much better to use no drugs than to do this. I should first direct a suitable hygiene and course of diet, and then cautiously employ remedies of a tonic, alterative, nutrient and sedative character, according to the special indications of the case. Medication should be suspended occasionally in order to see how the case is progressing. Do not

drag the system down with excessive medication. We are dealing with a feeble digestion and feeble vitality, and should use remedies with great care. Just because we have the symptoms, excessive urination and sugar in the urine, upon which we can produce wonderful changes by powerful remedies directed to the nervous system, we must not be drawn into performing the experiment as though these symptoms constituted the whole disease, forgetting that they are only prominent symptoms of a highly complex, deep-seated and serious disorder.

Polyuria.

In connection with this subject it would be proper for me to briefly allude to the other condition in which excessive urination is a marked symptom, although the urine contains no sugar. This is known as polyuria, or diuresis. It is also called diabetes insipidus, but there is no excuse for this term. Insipidus simply means not sweet, while the use of the term diabetes at once introduces confusion. It should be termed polyuria, or diuresis. In this affection there is excessive urination, with the secretion of urine of low specific gravity, sometimes 1005 or 1008, and sometimes as low as 1002 or 1001. I have seen it as low as 1000.5. It is almost colorless, and at times almost like spring water. It contains no abnormal ingredient, no sugar, and no albumen. The normal constituents are present, sometimes in full quantities in the course of the day, sometimes somewhat decreased. It is needless to say that a quantitative analysis would give less urea and uric acid to each fluid ounce if the patient were passing 240 ounces than if he were passing only 30 ounces, but the whole amount might be equal.

The quantity of urine passed by such patients varies from five to fifteen pints, or even more. Diuresis occurs under various conditions. It may occur as a temporary condition in dropsical affections. A patient with an ovarian cyst will sometimes suddenly have a diuresis, with the discharge of all the contents of the cyst. I have seen this several times. In the same way, in hydrothorax and ascites, diuresis may occur, and the effusion disappear. It also sometimes occurs as a means of crisis in fevers and inflammatory diseases. A fever may terminate and copious urination take place. I have seen the finest instances of this in small-pox at the close of the eruption, when the quantity of urine has suddenly gone up to 200 or 300 ounces of spring-water-like fluid, and the patient returns from his bloated appearance to a natural condition, and may even appear shriveled.

Polyuria is a symptom of kidney disease, particularly of interstitial nephritis. As I have frequently told you, there may be scarcely a trace of albumen in the urine in this form of renal disease, but sooner or later careful examination will show the presence of albumen, and you will also find the cardiac affections, the rigid arteries, the increased arterial tension, and the other conditions which go with that general disorder of which interstitial nephritis is the chief local lesion.

Diuresis also occurs as a separate affection and not associated with the conditions mentioned. It is then largely under the influence of the nervous system. The influence of the nervous system in

producing copious urination is seen in hysterical cases and in depressed neurasthenic patients. There seems to be in some cases a deranged condition of the nerve centers and ganglia which control the circulation of the kidneys, and which thus allow an excessive drain of liquid from these organs. We find this disorder occurring in persons with sensitive nervous systems, usually anæmic, often with impaired digestion, and with a tendency to other nervous symptoms of a depressing type.

The diagnosis of this condition is of course very simple. The patient passes water often and in excessive quantity, of light color, low specific gravity, and containing no abnormal ingredients.

There are few, if any, general symptoms. The affection may last a long time and have very little effect upon the general health. The possibility of interstitial nephritis must always be borne in mind and carefully excluded.

If we can exclude nephritis, diabetes and serious intra-cranial trouble, the prognosis of this condition is favorable.

The treatment consists in the first place in careful attention to the general health, the removal of depressing causes, and the regulation of the diet. The digestion is to be improved and the anæmia removed by the use of suitable remedies. In these cases ergot produces good results and can be recommended. It is perhaps the best remedy for this affection. It should be given in increasing doses according to the tolerance of the system. So, too, we find that the bromides of the alkaline bases, the bromides of arsenic, of iron and of zinc, are all valuable in this condition. You will select one or the other according to the general condition present. The use of hydro-therapeutics, suitable bathing, and friction, is very desirable. The use of electricity is also serviceable, a mild galvanic current being employed.

The disease is not a very common one, and is more frequent in the young. It may have a varied significance. It is a symptom of different morbid conditions, so that its management will vary according to its particular pathological relations.

MEDICAL SOCIETIES.

OBSTETRICAL SOCIETY OF PHILADELPHIA.

Stated meeting, Thursday, September 3, 1885. The President, B. F. Baer, M. D., in the chair.

Dr. B. F. Baer read the following report of a case of

Ovarian Cystoma, Complicated with Peritonitis and Phlegmasia Alba Dolens. Double Ovariectomy.

Mrs. M., aged 31, has been a widow nine years; she had one child ten years ago, and had enjoyed good health until about three years before I saw her. At that time she observed that her abdomen was increasing in size. This gradually progressed for eighteen months, when she was large enough to attract the attention of her neighbors. After this, the growth remained almost stationary, and did not affect her general health until the latter part of March of the present year,

when she was suddenly seized with pain in the left iliac region. The pain was acute and radiating in character, extending principally down the anterior portion of the left thigh. She attributed the attack to an unusual exertion. Although she made an effort to continue her avocation—that of seamstress—she was compelled to give up and send for her physician, my friend, Dr. John K. Haney, of Camden. When Dr. Haney first saw her, her abdomen was very tender over its entire surface, purple from congestion, greatly distended, and tympanitic in its upper, but dull in its lower portion. She was suffering great pain, and had constant nausea and vomiting; her skin was hot, pulse 120, and temperature 103°. From the history, symptoms, and physical signs elicited, the doctor diagnosed ovarian cystoma, with supervening peritonitis. He administered quinia per rectum and morphia hypodermically, together with counter-irritation over the abdomen. Within a week, the patient appeared to be better, when through the kindness of Dr. Haney I first saw her. The tympanites had disappeared and the pain was not so severe, but the abdomen was still very tender on pressure, especially in the left iliac and right umbilical regions; her features were drawn and flushed, and presented an anxious expression; her tongue was dry and heavily coated, pulse quick, and temperature 102°. She lay quietly in the dorsal position, with her thighs flexed. The abdomen was as large as at full term of gestation, and was projecting. It was dull on percussion everywhere except along the line of the colon, and in the epigastrium, and there was evident fluctuation. The uterus was retroverted, not freely mobile, and very tender on pressure on the left side. Above and upon it could be felt the lower border of the circumscribed growth which occupied the abdominal cavity. I fully agreed with Dr. Haney's diagnosis of ovarian cyst, complicated by peritonitis. As she seemed to be somewhat better, I advised a continuance of the treatment as previously pursued, with the hope of obviating the necessity of ovariectomy during the unfavorable condition in which she then was. The peritonitis continued to improve slowly, but a new trouble presented itself in a very painful swelling of the left lower extremity. This continued until the limb was greatly increased in size. Its temperature was much higher than that of its fellow, which seemed to be in a normal condition. She now required large doses of morphia to relieve her pain, and she was losing flesh and strength. She still had nausea, and took almost no nourishment. Her temperature and pulse had again risen to the highest point noted. Both she and her friends were willing and anxious that we should do something more radical than simply to wait for a more favorable condition for operating if we deemed it proper. I believed, from the symptoms and physical signs, that the inflammatory action was external to the cyst, and not within it, and for that reason decided to wait for a subsidence of the acute symptoms, which I rather confidently expected. At the same time I held myself in readiness to operate at once, should the patient not improve or become worse. The next day she showed signs of slight improvement. Treatment, both local and general, continued.

The acute symptoms gradually subsided to those of a subacute condition. The temperature had decreased to 101°, pulse 100 but weak. She was still unable to retain food, and was extremely weak. I advised further delay. But she did not improve much after this, her temperature and pulse remaining about the same as that noted above. Her stomach had regained its power to a slight degree to retain and digest liquid food. She had now been confined to her bed more than two months; her left leg was powerless. There had not been the slightest improvement during the two previous weeks. We therefore decided to remove the tumor.

Operation.—June 19, 1885. Assisted by Drs. J. K. Haney, W. A. Davis, and H. M. Christian, and in the presence of a section of the class from the polyclinic, I made an incision three inches in length down to the peritoneum, and then checked the hemorrhage, which was free, with clamp forceps. I next very carefully incised the peritoneum, and found, as I had expected, that it was closely united to the cyst wall. These adhesions of cyst to peritoneum were universal, and it required careful and patient manipulation to separate them. The parts were exceedingly vascular, and hemorrhage was profuse. After separating it as far as possible, I tapped the cyst and allowed the contents, which were semi-liquid and chocolate-colored, to drain away. I next closed the puncture made by the trocar, and then completed the separation of the cyst from its adhesions and removed it. As there was a very general and free oozing of blood from the broken vessel, I introduced a number of large flat sponges and spread them over the bleeding surface. An assistant now made firm pressure upon the external surface of the abdominal walls, whilst I ligated the pedicle and removed the tumor. The cyst developed in the left ovary, and the pedicle was slender, not unusually vascular, and of good length. The right ovary was diseased, contained a number of small cysts, and was double the normal size. I removed it also.

Examination now showed that the hemorrhage had almost ceased, but there were still a number of points from which blood flowed. The peritoneum was intensely injected, and I disliked very much to pick up bleeding points, for fear of making the hemorrhage worse. I therefore reapplied a large flat sponge, and had firm pressure again made from without, whilst I proceeded to place the sutures for the closure of the incision. I then removed the sponge and found very little blood upon it. I replaced it by a long, narrow strip of sponge, which I allowed to project from the lower angle of the wound, and then again cleansed Douglas's cul-de-sac and other dependent portions of the peritoneal cavity, after which I quickly tied the sutures from above downwards, removing the long sponge through the lower angle of the wound before I had encroached so closely upon it as to compress it in its removal. It was only slightly stained. I quickly applied the external dressing, making an unusual amount of pressure by cotton and bandage. The operation was finished, but the patient bore it badly. Her extremities were cold and purple, her face livid, and pulse very weak. Stimulants hypodermically and the application of external heat, which were be-

gun during the operation, were continued after she was returned to bed. She remained in an almost collapsed state for many hours, but gradually reacted, and the next morning was in a fair condition. Her temperature was lower than it had been for weeks; pulse 112, but weak; stomach quiet; no pain; no tympany. She had taken an occasional small piece of ice, but nothing else, except the morphia, since the operation.

21st. Temperature, 102°; pulse, 120. Slight pain and tenderness in left iliac region; she had been very weak and faint during the night, for which brandy had been administered in repeated small doses. The swelling and pain in the limb had diminished. She had not vomited since the operation, and felt hungry. Ordered a teaspoonful of milk every second hour.

22d. Comfortable, and doing well. Temperature, 99½°; pulse, 90, and strong; slight metrostaxis; passed flatus per rectum. Milk increased to a tablespoonful, and retained.

24th. Temperature, 99°; pulse, 85; general condition greatly improved; no pain; no tympany; examined wound and found it united throughout; removed sutures.

25th. Doing well and is bright and cheerful. She took nearly a quart of milk during the last twenty-four hours and digested it.

30th. She has been gradually improving. Temperature normal; pulse 95; bowels moved to-day. She is taking solid food, and expresses herself as feeling quite well. Limb improving. She can now move it.

July 12. Sat up to-day for the first time, the twenty-second after the operation.

August 30. A note received from Dr. Haney to-day informs me that Mrs. M. is going about attending to some of her duties, but that she has not yet regained her strength fully, and that her limb is still weak.

The recovery of this woman under the forlorn circumstances just narrated is certainly a great triumph for our art; but the case serves a better purpose in forcibly illustrating the danger of deferring operative interference in ovarian cystoma simply because the patient is comfortable and suffering no inconvenience from the presence of the tumor. The subject of an ovarian tumor is in constant danger of injury from slight causes, which may produce such changes in the tumor as to render what might have been a simple and safe operation, one of extreme hazard. This had been a simple, slow-going cyst, and had not markedly affected the health during its three years of existence; yet it suddenly became inflamed, and the patient narrowly escaped death as a result. The case furnishes a strong argument in favor of operation as soon as the disease is diagnosed. Of course, there are qualifications, and each case must be decided on its own merits; but the rule that an ovarian tumor should be removed as soon as it is known to exist, is the only safe one to follow.

As a striking contrast to the cure just related, and to show the value of the principle enunciated, I will report the following case of

Polycystic Ovarian Tumor, Double Ovariectomy.

A. K. was sent to me August 5, 1885. She was nineteen years of age, single. Puberty was

established at sixteen, and she had menstruated regularly until six months previously. She then without cause, so far as she knew, began to flow more freely at her periods, and they continued longer. About the same time she noticed a small lump in the right iliac region. This increased in size so that soon the entire hypogastrium was distended, and when I first saw her she was as large as at the eighth month of gestation. Her face showed marked signs of emaciation and pallor, and the drawn, anxious expression of ovarian cystic disease. She was then having a profuse metrorrhagia every two weeks. She had not suffered any pain, and up to within a few weeks very little inconvenience, except for the frequent metrorrhagia.

During the last month, however, her health had been failing. She had lost flesh, had a weak, languid feeling, and suffered much from the weight of the growth. Physical examination in the dorsal position revealed a projecting, slightly irregular abdomen, larger on the right side, dull on percussion over the entire anterior surface, but resonant along the line of the colon. Palpation showed imperfect fluctuation and several firm irregular masses within the abdominal cavity. The vagina was virginal, the cervix uteri was pointing forward, the body of the uterus retroverted; the whole organ enlarged and soft. It was only slightly movable independently of the tumor. The sound gave a measurement of three inches.

I diagnosed a polycystic disease of the right ovary, and advised immediate operation. Six days afterwards, August 11, she entered my private hospital, and on the 13th I operated, with the assistance of Drs. H. M. Christian and J. N. Richards. I made an incision two and a half inches in length, and came upon the surface of the tumor, which presented the white glistening nacreous appearance, especially common to thick walled polycysts. Tapped with Hodge's trocar. The contents were so thick that they flowed very slowly, and it was necessary to puncture several smaller cysts, which was done without removing the instrument. Even then the mass did not collapse much, because of a large number of young or child cysts. After closing the puncture, I enlarged the incision to three inches, but I had considerable difficulty in removing the tumor. It was necessary to make firm traction with rotatory movements, whilst Dr. Christian exerted a counter force and pressure through the abdominal walls. Fully ten minutes were occupied in delivering the tumor after it was tapped, but I was rewarded with an incision that looked so small that it seemed almost incredible that this large mass had passed through it. There had not been a single adhesion, but the pedicle was short, thick, and vascular. I tied it with Tait's Staffordshire knot, cut the tumor away and dropped the stump. The tissues of the left ovary were found to be entirely disorganized and degenerated into a cyst as large as a walnut. This I also removed. The uterus presented a very vascular appearance, and was somewhat enlarged. After assuring myself that the peritoneal cavity was entirely free from any foreign matter, I closed the incision, dressed the wound, and returned the patient to bed. Temperature normal, pulse 96. No pain, but as she felt a little sore and

restless, $\frac{1}{4}$ grain of morphine was given hypodermically; small pieces of ice for thirst.

14th, 8 a. m. Twenty-six hours after the operation, milk in teaspoonful doses was allowed, water when she desired it.

15th. Metrostaxis began this morning.

18th. Union complete; removed sutures. Her recovery was uninterrupted. She sat up for a few minutes on the eleventh day, and went home eight miles in a carriage on the eighteenth day after the operation. To-day she sent a request to be permitted to go out, because she is feeling so well.

Certainly nothing could have been gained by procrastination in this case.

Dr. Goodell congratulated Dr. Baer on the good results obtained in such a serious case as that first reported. Great care in the asepsis of these cases should be observed. In one of his cases of septicemia before the operation, after complete union had been secured, the stitches had been removed, and after the patient was up, an abscess was observed forming in the line of union, and was very persistent. Finally, after careful search, a ligature, which had been tied around the pedicle of one of the ovarian cysts, was found and removed. Subsequently, the other appeared, and after its removal the abscess healed.

He did not like to remove the stitches so early as Dr. Baer removed them; and he reminded Dr. Baer of a case in which he had assisted Dr. Goodell. The operation was performed on a December 5. Convalescence was rapid, and the patient was so impatient to be home on Christmas that she could not be restrained, and on the nineteenth day after the operation she took the cars for home. The train was derailed, and the jolting caused the cicatrix to open. The physician who was called in closed it immediately, and the patient recovered. In another case a cough caused the wound to burst open and reveal the bowels after the stitches had been removed. This patient also recovered. For these reasons he never removed the stitches before the eighth day, and not until the bowels had been opened.

Dr. Goodell inquired of Dr. Baer his method of closing the opening in the cyst after it had been tapped preparatory to its removal from the abdominal cavity. Does he employ pressure forceps? What method of dressing the abdominal wound?

Dr. Baer closes the cyst puncture with Wells's clamp forceps when the cyst wall is strong enough. In some cases he stitches up the opening, or ties a string below it when the cyst walls are loose and soft. He closes the external wound, as he had been taught by Dr. Goodell, with silk sutures, and dresses it with salicylated or absorbent cotton, adhesive strips to hold the cotton in place and take the strain off from the stitches, and over all a bandage. He removes the sutures on the fourth or fifth day in order to avoid the danger of pus forming in the suture tracks, as has sometimes occurred when he has allowed them to remain as long as eight days.

(To be continued.)

DR. HOLMES makes a suggestion in *The New Portfolio* to the effect that while a doctor's patients must put their tongues out, a doctor's wife must keep her tongue in.

EDITORIAL DEPARTMENT.

PERISCOPE.

Riggs's Disease.

G. A. Mills thus writes in the *N. Y. Med. Jour.*, July 25th:

At a meeting of the Connecticut Valley Dental Association, about eighteen years ago, at Northampton, Mass., John M. Riggs, M. D., of Hartford, Conn., was invited to make a proclamation (associated with a clinic) of his views concerning a diseased condition of the gums and the sockets of the teeth which often causes the loosening and falling out of the same. Up to this time nothing had appeared in the literature of dentistry except that which classed this disorder among the incurables, and it was spoken of as the result of senility; hence the common remark among people, "My father's and mother's teeth all dropped out, and it is only a matter of time with me." The removal of tartar as an external deposit upon the teeth was classed simply as an operation of scaling. This operation only recognized the foreign matter that could be seen. Dr. Riggs, in announcing his original views—while he gave it as his opinion that the deposits of tartar were the cause of the disorder under consideration—stated that his observation and experience matured the knowledge that there was a decided progressive inflammation existing under the gums and wasting both the hard and soft tissues, so that their attachments with the roots were gradually being destroyed. His knowledge of surgical principles suggested a practical application to these diseased localities, and he proceeded to the removal of all foreign substances from the roots of teeth, and the trimming of the necrosed edge of the alveolus to the life-line, leaving nature to restore to a normal condition. Dr. Riggs's view naturally excited a variety of comment—some expressing disbelief, and others accepting his novel ideas and statements. Not a few denied the existence of a necrosed edge of the alveolus. Dr. Riggs had devised a set of instruments well adapted for the treatment of this disorder, and these were unique and new, yet there was an effort on the part of a very few to dispute his claim to this invention; this did not prove a success. This body (the Connecticut Valley Dental Association) subsequently passed a resolution giving credit to Dr. Riggs for originality relative to the new pathology of the disorder now termed Riggs's disease, and so named at about that time in honor of Dr. Riggs. I have previously remarked that nothing of the doctor's views had ever been published so far as known. But—having become personally much interested in this disease, and in the discussion of it, and also finding my position regarding it misunderstood by several dentists—I was led to prepare a series of articles (six), which were published in the *Dental Cosmos* during the years 1876 and 1877, under the title of "What I Know about Riggs's Disease," in one of which articles I challenged the record of views corresponding to Dr. Riggs's. Since then not a word has come from

any source to show that he is antedated in the matter. I may add that a confirmation of his views and their acceptance by many members of the dental profession have gradually taken place. I am glad to say that to-day it is the most prominent subject for consideration before dentists generally. Only a limited number, however, have come to a correct understanding of what is required, and how to meet the requirements. These few are demonstrating a successful treatment of the disorder. At this point of my article it seems advisable to introduce a feature which I shall elaborate later on; it is in reference to the technical term by which this disorder is now known, viz., *pericementitis*, substituted for the term well known by medical men—*dental periostitis*—meaning inflammation of the dental periosteum. This term (*pericementitis*) originated in the laboratory of Charles Heitzman, M. D., of New York city, during the late investigations made there by dentists under his instruction. The general subject of *pericementitis* it is not my design to discuss here, but it is necessary to make the distinction clear between Riggs's disease and general *pericementitis*. Riggs's disease is a peculiar phase of *pericementitis*; it may exist to the final loss of all the teeth, without a sign of any other phase of this disorder.

As the nature of this disease is so plainly embodied in my brief history of the matter which includes its pathology, it would seem that my readers need not be ignorant of its main features; therefore I pass to consider the diagnosis.

To diagnosticate an incipient case, or first manifestation, as it is often seen in the mouths of children (even at a very early age): The simplest form of the disease may often be seen at the peripheral part of the festoon of the gum-tissue, indicated by a congested appearance; by lifting this gum with a delicate instrument, there will be seen a little seed-like granule of calcific substance. Another case might show a deep red and raw-looking, elongated appearance of the gum-tissue about the necks of the teeth, and with or without any deposit; there may be also a looseness of the gum about the teeth, which causes quite a pocket. This latter condition is often a sequela of exanthematous disorders. The gums are often extremely sensitive to the touch. In the various cases we find general congestion, easy hemorrhage, pale and bloodless gums, a decidedly anemic and frequently pimply surface of the gums—the latter appearance in adults. Not uncommonly a first warning to the patient (adult) will be pain or tenderness about the tooth or teeth, and an examination will not reveal any decay, death of pulp (commonly called nerve), or evidence of inflammation of pulp. This is what I shall term a subtle manifestation, for it has been believed there could be no inflammation of the dental membrane without a disturbance of the pulp. This is now proved to be untrue, for abscesses do occur while the pulp remains normal. In a large proportion of cases there will be, on light pressure, a flow of pus from under the gums, and oftentimes it is a

copious discharge. This may be general, or it may be confined to a single tooth. Looseness of one or more of the teeth may be observed; also malposition, and this commonly after an occluding tooth is lost. I have given in detail enough of the manifestations to lead one even superficially familiar with unhealthy conditions to the diagnosis. It will be observed that I have omitted other conditions of disease that are manifested in the mouth, associated with the teeth and allied structures, viz.: syphilis, salivation, and scurvy. While in some instances these may be separated from the disorder in question, yet they are sometimes complications. I will mention another marked diagnostic feature associated always with an active stage of the disorder, and that is the odor which is distinctly noticeable to one familiar with Riggs's disease. There are other local manifestations that are, without doubt, largely influenced by the disease, but are commonly classed as expressions of constitutional debility, and still they may be wholly the result of the disorder under definition. This is proved by the arresting of the disease when the disabilities referred to are removed. Recession of gum-tissue is often seen, and no apparent inflammatory condition. While this is a peculiar phase, I maintain it is the same disorder. My term for it is atrophy of the gum-tissue—erosion of the tooth-structure, causing grooves across and around the necks of the teeth, not infrequently taking a serpentine direction. This also is a manifestation of the same disorder, as it is arrested by the treatment which will now be described.

Treatment.—As the nature of the disorder has proved to be novel, so will the treatment appear, as Dr. Riggs was the inventor of a set of instruments with which to perform the operations required in treating the disease. Each one is six inches in length, including the handle, which is of ebony and steel, octagonal and tapered; the blades are seven-eighths of an inch long, bent at an obtuse angle. The instruments are in two pairs, and there are two single ones. One pair has a knife edge and a safe edge; the other pair has the same, but these are reversed in their bevels—made so for the purpose of working at a different angle of the mouth, and from the operator instead of toward him. The single ones are double knife-edged, and differing in thickness of blade. Perhaps no better idea can be given of the general form of the blades than to say they resemble the half of a snipe's bill, the long, ovoid point being particularly adapted to ferreting out the intricate and deep-seated disordered parts of the hard and soft tissues about the roots of the teeth. In their dimensions they may seem ponderous to a novice, but in the hands of an expert no instrument can be more efficiently and delicately used. It must now be seen, by the description and location of Riggs's disease, that most of the operation is under the gum-tissue and out of sight, so that necessarily to know when the operation is complete at a given point can only be accomplished by an acquired and acute sense of touch. It may be said that the Riggs treatment has instituted a distinct and systematic mode of arresting the disease. Rightly understood and rightly practiced, I regard this treatment as the most efficient in dental surgery. The

severity of the cases differs according to constitutional conditions, and, if the dentist is the doctor, he will know whether the patient can be wisely aided by constitutional treatment. The prognosis must be based upon the conditions as they appear in each case.

From an extensive experience within the last ten years in the treatment of a large number of cases, and the success attained, I am justified in saying that Riggs's disease can no longer be classed among the incurable ones.

It is perfectly plain that this disease is not confined to any one period in life. Under the age of forty I have had numerous cases in the most active stages of progress—so noticeable that there was almost spontaneous hemorrhage of the gums, and such an excessive flow of pus that the service of napkins for absorbing was required in sleeping hours. These facts can be testified to by well-known physicians. As one impressed with the prevalence of Riggs's disease, and its destructive effect on the general health, I should be remiss in duty if I were silent, or neglected to call the earnest attention of medical men and the public to the grave facts, for they have had too little consideration. I would say emphatically that the most serious complications may arise, and the worst septic conditions may be threatened and encountered, from pure neglect. That one disorder not arrested calls others of a more serious nature into existence, is a well-known fact among medical men.

Chronic Endo-metritis, Cervical and Corporeal, with Prolapsus Uteri.

Dr. W. E. Buxton thus writes in the *Cinn. Lect and Clinic*, July 25:

A history of this case is given for the purpose of showing what a train of symptoms and diseases can follow another disease and be cured by simply removing the original cause.

As taken from my notes: Was called to see Mrs. R., aged 27 years, blonde, medium build, of volitive and encephalic temperament. I found her suffering from the above malady. She had been previously treated by two neighboring doctors with but little success, and to the dissatisfaction of herself and husband. After making a thorough examination of the case (nothing short of a thorough one will ever develop the true nature of such cases), I informed her of her condition, and told her I thought by careful treatment and time she could be relieved. Thus the case was given into my hands for treatment.

Her condition was not very encouraging. She was decidedly anæmic, confined to her bed most of the time, pulse very feeble, tongue slightly red and pointed, severe pain in the head extending from frontal to occipital region; sometimes a burning, hot pain in the top of the head. She would feel dizzy whenever attempting to walk, would become despondent and melancholy upon hearing any strange news; feet and hands would become cold every evening and bathed in a cold, clammy perspiration; general myalgia, habitual constipation and gastric disturbance. She had a dry, hacking cough, which might lead us to suppose her lungs were involved, but they were not; the parenchymatous substance was

normal. Another very persistent complication was the functional heart trouble. She was determined to believe her heart badly diseased, as she expressed herself, but I found no valvular, neither organic lesion whatever; although paroxysms of dyspnoea had occasioned alarm to her friends time and again. Of course we will find quite frequently such symptoms in the hysteric patient, but this case was free of hysteria.

Several years ago she commenced suffering with a burning, hot pain, in the hypogastrii region, pain extending down left leg, also in left side and shoulder. She complained of a pulling-down pain in the lumbar region continually; menstruation was very irregular, sometimes amounting to menorrhagia; a profuse leucorrhoeal, alternating with a sanguineous discharge would, appear between the monthly molimen. Upon digital examination the os could be plainly felt near the external orifice of the vagina, fundus leaning posteriorly and to the region of the left ovary; the neck was considerably enlarged, very sensitive to the touch, and indurated. Examination per speculum showed the neck engorged, inflamed, and a follicular disintegration of the os.

Upon introducing the sound or sponge-mop, there would be a tenacious muco-sanguineous discharge, also disease products would adhere to the mop when first withdrawing it; any pressure against the fundus would cause excessive pain.

This was the condition of the case when I commenced treating her; the lady to-day is well in every respect, excepting a slight gastric catarrh, which is not amenable to any treatment I have given her. Conception did not, and I think could not, take place for four years, but she is the happy mother of two children since.

As the treatment for this case was successful, it may be of interest to some one else. First, I gave her the following tonic:

R. Mur. tinet. ferri,	f. ʒij.
Quinis sulph.,	ʒj.
Tr. nux. vom.,	i. ʒss.
Brom. pot.,	ʒj.
Syrup auranti,	ʒij.
Aque,	ʒvj. M.

Sig.—Teaspoonful, three times per day after meals.

Continued this for two months, discontinued for one week, then gave two months longer, when I discontinued it altogether. I then gave her:

R. Sulph. mag.,	ʒij.
Mur. tinet. ferri,	ʒj.
Aque,	ʒj. M.

Sig.—Wineglassful every morning in half a glass of sweetened water, before meal.

While taking internal remedies, I had her use the vaginal injection of hot water for 20 minutes every night, followed by the following:

R. Acid carb.,	gtts. x.
Zinci sulph.,	ʒj.
Acetate plumb.,	ʒss.
Morph. sulph.,	grs. v.
Aque,	ʒj. M.

Inject two ounces every night. The hot water injection would cleanse the vaginal cavity of all discharges, as well as have a contracting and soothing effect, and the astringent last, to give

strength and vitality to the weakened wall of the vagina. As a local application to relieve the follicular ulceration of both cervix and body of the uterus, I applied the nitrate of silver, 20 grains to the ounce of water, every eight days. My method of using the silver is with a sponge mop. Introduce a small one first through the neck, saturated with glycerine, so that you can apply the caustic to the fundus without producing the astringent effect in the cervix before reaching the fundus. I continued this for two months, then I relied solely on the hot water and astringent injection.

After using the tonic she gained in strength, had a healthy color, gained in flesh, the rigors and general malaise was relieved, her menses became regular and normal. The constipation was overcome by the sulph. mag. mixture. The uterus returned gradually to its normal position. Sanguineous discharges ceased. Sound could be introduced to fundus without pain, and I believe, had I not used the local remedies unceasingly, the trouble in the uterine cavity would have been in the same, yes, a more painful condition to-day than it was then. The slight palpitation that remains gives her no more trouble than it did in the virgin state, and as its severity was vastly dependent on other grave symptoms that are comparatively cured, so have the frightening paroxysms of dyspnoea been controlled.

These cases may seem old to read about—however, they are just as obstinate to treat now as years ago, with the same appliances and remedies (and even more so); but we are advancing in our mode of treatment, and with strict attention, close observation, and a gentle hand, we can stand death off quite often, and put many a poor, suffering woman on safe ground once more.

A Case in which a Patient Removed Forty-three Calculi by a Novel Method from His Own Bladder.

Dr. James Murphy thus writes in the *British Medical Journal*, August 8, 1885:

About five years ago, the patient, whose age was about fifty, and who had always enjoyed good health, was very much surprised to find one day, as he was passing his urine, that it suddenly stopped before the bladder was relieved, and on consulting his medical attendant, the latter passed a silver catheter, and immediately struck a stone. The patient was apprised of this, and lithotripsy was suggested; but, being of a mechanical turn of mind—he was by profession an architect—he declined to submit to any operation, preferring first to see what he could do in that way himself. While thinking the matter over, and maturing his plans, he spent several days in trying to get the stone back into the urethra, with a view of ejecting it by a sudden flush of urine, and for this purpose he tried several positions, on his face, knees, etc.; but though he could feel the stone fall on to the neck of the bladder, and, as he thought, touch the entrance to the urethra, he failed to make it enter the latter. After some deliberation, he constructed an instrument, consisting of a Florence flask, into which a cork was tightly fitted. This cork was perforated by a bone tube, into which a No. 10

black French catheter was made to fit with a screw; and, to make it perfectly air-tight, an India-rubber band could be rapidly passed over the joint. Owing to the extreme thinness of the glass in the Florence flask, boiling water could be poured into it, and he had some of the straw covering fitted on to the end of it, which, being a bad conductor of heat, enabled him to hold the flask after the boiling water had been poured out, while he screwed it on to the catheter previously introduced into his bladder, and produced a vacuum by the application of cold cloths to the flask. He then had an aspirator constructed, very similar to that used by Sir Philip Crampton many years ago, but of which it is needless to say he had never heard. He made several attempts with this instrument to get the stone into the urethra, for he never contemplated removing it directly by the aspirator, but never succeeded, as, not having a stop-cock as in Crampton's aspirator, the formation of the vacuum was too gradual to form a sufficiently rapid current for his purpose. He therefore soon devised another form of aspirator, which was simpler in construction, and more efficacious in use. He purchased a large ear-syringe, to which fitted on a No. 10 catheter, from which he had removed the end as far as the eyelet; and while his bladder was full, he got on to his knees, rolled the stone about till he considered he had it at the entrance to the urethra, then gently passed his catheter with syringe attached till he struck the stone; then, without displacing the stone, he gently withdrew his catheter about an inch, and rapidly pulled out the piston, and, after some failures, succeeded in getting the stone into the urethra, when, by means of straining at first, and afterwards, when it came within reach of his fingers, by external manipulation, he had the satisfaction of at last getting the stone into his hand; but he found his troubles were not then ended, for he found there were some others, which he removed in the course of a few days. He then continued quite well for some time, these operations of what may well be called "litholapaxy" in no way inconveniencing him; but after the lapse of several weeks, he found the old pain in his right loin (indicating the passage of a calculus through the ureter) returning; and, after it had ceased, he again removed a couple of stones, in the same manner as previously; and so matters continued for a space of two years, calculi forming now and then, generally two or three being passed by the right kidney (never from the left), in rapid succession, and then being removed from his bladder; he continued well for several weeks, when the same process was gone through again. At last, getting tired of this breeding of stones, as he termed it, he was induced to go on a diet in which alcohol and saccharine fatty matters were avoided; and in a little time, no stones were found, and it is now nearly two years since he has been troubled with one. In all, he removed forty-three uric acid calculi, varying in size from a No. 6 shot grain to a large pea. He generally removed them as soon as they entered the bladder, and became so expert latterly that he could generally bring the stone into the urethra in two or three attempts; but if he were otherwise engaged, he did not trouble much about the calculi, and sometimes

kept them in his bladder for a couple of weeks without removing them. But this is a practice which he cannot recommend; for he assured me that, as soon as a calculus entered the bladder, the sooner it was removed the better. He knows each of the calculi by distinctive marks, and has an anecdote about most of them. One bears the mark where it was struck by the silver catheter; another was stopped in the urethra by coming sideways, and had with much difficulty to be flushed straight; another he calls "the porcupine," as he drank some medicine to try to dissolve it, with, he alleges, the unpleasant result that the soft parts disappeared, and left several rough edges, which made him feel as if he had the fretful animal in his bladder. As is usual, a distinct history of gout was obtained.

REVIEWS AND BOOK NOTICES.

NOTES ON CURRENT MEDICAL LITERATURE.

—An excellent address delivered by Dr. J. C. Sundberg, of Seattle, Washington Territory, on "Modern Civilization and Its Attendant Evils," has been printed in pamphlet form. He especially calls attention to the threatened danger from over-production of the race.

—In a reprint before us, Dr. Edwin R. Maxson, of Syracuse, N. Y., explains the abortive treatment of typhoid fever. He relies largely on the sulpho-carbolate of sodium.

—A new bandage for fixation of the humerus and shoulder-girdle has been devised by Dr. Charles W. Dulles, of this city, and is described in a paper reprinted from the *Medical News*.

—Dr. L. Emmett Holt, of New York city, in a short reprinted article, explains his doubts as to whether quinine aborts pneumonia. As weighed against actual observation, his views cannot be held conclusive.

BOOK NOTICES.

Moisture and Dryness: Or the Analysis of Atmospheric Humidities in the United States. By Charles Denison, A. M., M. D. Price \$1.00. Jansen, McClurg & Co., Chicago.

Few climatological features so immediately affect the salubrity of a locality as its humidity; hence, Dr. Denison has completed a valuable study in presenting this characteristic with such an apparatus of statistics, colored maps, and explanations, as cannot fail to be most instructive to the reader. It constitutes but one branch of his extended and thorough researches into the climate

of the United States, to which he has for years devoted earnest attention. We can commend this monograph as eminently meritorious.

Six Lectures on School Hygiene, Delivered Under the auspices of the Massachusetts Emergency and Hygiene Association to teachers in the public schools. 8vo., cloth; pp. 201. Boston, Ginn & Co., 1885.

These lectures are all by well-known and able physicians—Drs. Frank Wells, F. W. Draper, C. H. Williams, G. B. Shattuck, and C. F. Folsom. They treat of school hygiene, heating and ventilation, the use and care of the eyes, epidemics and disinfection, drainage, and the relations of our public schools to disorders of the nervous system. While they are intended for general reading, having been prepared for popular audiences, there is much in them which most physicians can profit by perusing.

The Management of Labor and of the Lying-in Period. A Guide for the Young Practitioner. By Henry G. Landis, M. D., etc. 8vo., cloth; pp. 334. Philadelphia, Lea Bros. & Co., 1885.

There is a certain novelty about the plan of this work which will recommend it to the reader. Written not for the student, but for the practitioner, the author takes it for granted that the reader has a sufficient knowledge of anatomy and physiology to understand the ordinary functions and tissues of the body, and therefore he devotes the whole of his pages to an explanation of the process of labor, its natural course, and the accidents to which it is liable. Although in this well-beaten path it is not possible to display much originality, the method of presentation adopted by the writer, the clearness of his style, and the good judgment he displays in his recommendations for the management of difficult cases, will ensure to his work a favorable reception at the hands of the profession. It is unusually well printed, in a clear type, on heavy paper, and there are sufficient illustrations to set off the text to advantage.

On the Pathology and Treatment of Diseases of the Liver. By S. O. Habershon, M. D., etc. Second edition. 8vo., cloth; pp. 108. Price \$1.50. P. Blakiston, Son & Co., Philadelphia, 1885.

This little work is made up of three "Lettsomanian" lectures, delivered in London about ten years ago, and now appearing for the second time with such revision and correction as the advance in this branch of medicine renders desirable. The eminent position of the author and the skill in his presentation of this difficult subject gave

his lectures a popularity at the time, and fully justifies their reappearance at present. He does not undertake to offer an elaborate study of the subject, but taking as the themes of his three discourses, "The Liver and Its Nerves," "The Liver and Its Vessels," and "The Bile and the Bile System," he groups around these a number of valuable suggestions.

Fourth Annual Report of the State Board of Health of the State of New Hampshire; for the year ending April, 1885. Pp. 316. Concord, New Hampshire.

The subjects to which the Board has given particular attention during the past year, and which we find discussed at length, are typhoid fever, diphtheria, school-house hygiene, water pollution, the milk supply of large towns and cities, and drainage. At the conclusion of the volume the Board republish an essay by Prof. Chittenden, of Wisconsin, on the "Sale of Secret Nostrums, the Damage it Does to Health, and How it can be Checked." The investigations are most elaborate on the first two subjects named, and the papers referring to them should attract the attention of readers generally. The New Hampshire Board is composed of able and energetic members, and this volume is highly creditable to them and to the State which they represent.

Laryngoscopy and Rhinoscopy in the Treatment of Diseases of the Throat and Nose. By Prosser James, M. D. Fourth edition, enlarged, with Hand-colored Plates. 8vo., pp. 223. William Wood & Co., New York city.

The present edition of this work is a marked improvement over former ones. Much of the text is new, and the additions are so important as almost to give it the character of a new book. It is designed as a practical manual of instruction in all the manipulations incident to examinations of the throat and nose. There are numerous illustrations in the text, and also a series of full-page plates, representing the membranes of the parts in health and disease, carefully colored by hand in excellent imitation of nature. On matters of diagnosis and treatment the author is full, and his extensive experience is a guarantee that his recommendations in these directions may be studied with profit.

—If Ferrán is not to acquire fame through his so-called preventive inoculation of cholera, he appears to have had a good thing pecuniarily. The charge for each vaccination is said to have been about \$2.50, and for several weeks in succession he and his assistants inoculated an average of six hundred individuals a day.

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THE SANITARY HISTORY OF MERTHYR-TYDFIL.

The most conclusive proofs of the benefits to be derived from sanitary science are to be found in the substantiated results of its practice. Sanitarians who are familiar with these results wonder why the public are so indifferent to a science that promises them so much, promises that are so surely and easily demonstrable.

The sanitary history of the parish of Merthyr-Tydfil, as portrayed by Dr. Thomas Jones Dyke, before the recent meeting of the British Medical Association, is so replete with notable instances of what may be accomplished by sanitary science, that we note freely from it, in order to place weapons in the hands of sanitarians with which to combat the apathy and senseless arguments of the masses. This parish (in Wales) covers an area of nearly 18,000 acres. The climate is cold and wet, the rainfall averaging 57 inches annually. In 1843, when the population was 37,000, there was no water supply and only some few privies at the few decent houses, and none to the cottages. It is stated in 1849 that the town of Merthyr-Tydfil was entirely destitute of drainage, and no provision was made for excrement removal, and the water supply was contaminated from various sources, notably by twenty-one burial grounds scattered through the town. From 1846 to 1855, before any sanitary works were in actual operation, except the removal of accumulated mounds of ashes, etc., the death-rate from all causes, at all ages, was 332 per 10,000 inhabitants; the death-rate of children under one year, from all causes, 80½; of persons of all ages from fever, excluding typhus, 21½; from diarrhoea, at all ages, 11½; from phthisis, between ages of 15 and 55, 38½ per 10,000 of population.

In 1850 a Board of Health was formed. The usual outcomes of such organizations were effected. A pure water supply, good drainage, all that pertains to a well-appointed sanitary town, was secured.

The cost, it is true, was great, but the benefits derived were correspondingly great. The cost aggregated \$2,500,000; but the annual income from water rents and other sources is about

\$44,600, nearly two per cent. on the original cost, or three per cent. on the estimated value of the works, \$1,500,000.

Leaving the financial aspect of the case, and looking at the effects of thirty years of sanitary work, and the expenditure of \$2,500,000, upon the health and lives of the people, we find the following striking and instructive figures:

The death-rate from all causes has been lessened from 332 to 232 per 10,000; the deaths of infants under one year from 80 to 50 per 10,000; those from fevers from 21 to $3\frac{1}{2}$; that from phthisis from 38 to $18\frac{1}{2}$; from diarrhoea from 11 to 3 per 10,000; while the average age at death has been increased from $17\frac{1}{2}$ years to 27 years.

Much of the proclivity to bronchial catarrh and its sequences must undoubtedly be ascribed to the locality in which the population resides, a parish situated high amongst the mountains, having a wet and cold climate, and a soil sparingly permeable to water; much, also, must be due to the characteristics of the labors of the working men. Some, engaged at the iron and steel works, are exposed to all weathers at all hours of the night as well as day; laboring either at the blazing furnace, the boiling steel, or the glowing rail; others are occupied as colliers, toiling half a mile underground in a heated atmosphere, impregnated with coal-gases and coal-dust, and when labor is done, raised to the earth's surface at the pit's mouth, on the bleak mountain side, borne homewards in railway-carriages, or painfully trudging across lofty heaths to their cottage homes. The liability to chills, induced by such compulsory modes of life, must be apparent; and this liability, together with the vicissitudes of climate, will account for the extreme prevalence of acute lung diseases.

The one fact that the productiveness of the male citizens is, on the average, increased by ten years, is enough to cause us to cultivate the science of hygiene for the undoubted good it will bring us.

These brief statements furnish an immense amount of food for thought. Here we have in

black and white the evidence, financially, physically, and morally, of the supremacy of sanitary science. Hygiene and medicine are sister sciences, but the former is by far the more beneficent and important of the two. Hygiene is not a myth to be studied and pursued by enthusiasts; it is not a hobby; it is a *real, live* science, pregnant with incomprehensible blessings to mankind, and, to be practical, a science that, when rightly comprehended (as it should be now), will *pay*.

VACCINATION.

A week or so ago, in looking over the morning paper, our eye caught sight of a paragraph stating that a riot had occurred in a city in Lower Canada, in consequence of an attempt on the part of the authorities to enforce general vaccination. Some two hundred men had assembled together, and declared that under no circumstances would they submit to this protective operation.

The prevalence of such a sentiment as this explains at once the unusual fact of a summer epidemic of small-pox in Montreal and adjacent Canadian territory. We unhesitatingly say that wherever small-pox prevails in this age of the world it casts a sombre light on the civilization of that place and nation. It proves that the people are ignorant, negligent, or blindly bigoted; it shows that the authorities are feeble, or blind to their duties; it reveals a condition of intellectual darkness which is far behind what should be the average of the last quarter of the nineteenth century.

Were the precautions taken which all physicians and intelligent laymen are equally familiar with, epidemics of small-pox would never occur again. These precautions are all summed up in the word, *vaccination*, — vaccination with pure virus, preferably that derived directly from the cow, repeated often enough to render it certain that the vaccinated person is wholly unsusceptible to the specific action of the virus. This is all, and this is enough. Long personal observation, including a period during the war, when we had charge of a small-pox hospital, and in camps

where small-pox appeared in a malignant form, has impressed most incisively upon us the belief that vaccination, properly carried out, will conquer and prevent any epidemic of the disease, even under circumstances most favorable to its dissemination. Perhaps it will not eradicate it; but it will certainly reduce it to the level of one of the least to be dreaded of diseases which occasionally involve a fatal issue, and will positively prevent epidemics like this one in Montreal.

We urge, therefore, all physicians, all Boards of Health, all sanitary bodies, all intelligent laymen, to advocate frequent, and if necessary, obligatory vaccination.

There is now not the slightest difficulty in procuring an abundant supply of pure vaccine matter. The methods of obtaining it from the animals have been carefully studied, and are nowhere carried out with more scrupulous and successful care than by those physicians in our own country who have devoted their attention to supplying this product. We should recommend that the virus be obtained directly from them or their agents, rather than through trade channels, as more than one instance has been credibly reported to us where the latter supplied humanized instead of pure animal virus.

DEATH FROM EXERCISE.

The cow eats the grass and lies down to chew her cud; the man *bolts* his dinner and rushes to his business. The cow usually lives her allotted time, unless carried off by some acute, contagious, or infectious disease; the man becomes a martyr, first to dyspepsia and secondarily to some disease of malnutrition, and dies very prematurely.

The folly of exercising immediately after eating we see constantly demonstrated among our adolescent and adult population; but it is quite rare to hear of so young a child as one of seven, dying suddenly from such a cause.

In the *Lancet* is reported the case of a healthy boy (belonging to a robust, healthy family), who had never suffered from rheumatism, scarlet fever, or indeed from any disease save chicken-pox, who died suddenly under the saddest of circumstances,

because his death was so thoroughly preventible. After coming from school, one day, he ate a hearty dinner and immediately commenced to play cricket. Finding the time drawing near for the afternoon session, he ran to school (a quarter of a mile), and as he entered the yard, fell unconscious to the ground. In a very few minutes he was dead, notwithstanding the faithful and persistent practice of artificial respiration. At the post-mortem all the organs were found healthy, but the stomach was found full, the colon distended with flatus, and the sigmoid flexure loaded with feces. It may be mentioned that slight evidence of a recent latent pericarditis was noted. The left ventricle was decidedly dilated (think of it, in a child aged seven), owing, no doubt, to the fact that he had been in the habit of engaging in various athletic sports with his older brothers.

Here clearly was a death due to exercise, the loaded stomach and bowels being the needed exciting causes. We have ere this sounded the warning against violent exercise: iron muscles generally indicate an hypertrophied heart; the athlete is not destined to become the long-lived, respectable, and useful citizen; the slugger is all right in his place, and is a popular *beast*, but he is doomed to an early dissolution. It may be accepted as a general truism that any nature or amount of exercise that will cause the heart to jump and thump against the chest-wall is exercise carried to an excessive and alarming extent.

NOTES AND COMMENTS.

Leucoplakia Buccalis et Lingualis, or Ichthyosis Linguae.

E. Fletcher Ingalls, M. D., in the *N. Y. Med. Jour.*, July 25, 1885, reports a case of this rare and intractable disease, which has been recognized but a short time, and very little can be found upon the subject in general medical literature.

Leucoplakia buccalis is a chronic affection of the buccal mucous membrane, characterized by thickening of the epithelium and formation of white, opaline, elevated patches, which usually become fissured and painful, and after continuing

for a long time, are likely to terminate in epithelioma.

Most of the cases reported are from Germany, France, and England, but some have been recorded in this country; the disease seldom affects any excepting males over forty years of age; very few examples have been seen in women. Many cases are not recognized, and pass for constitutional syphilis.

The patches are generally found on the dorsum of the tongue or the inner side of the cheek and lips, but seldom, if ever, on the lower surface of the tongue or behind the anterior pillars of the fauces, and they are limited to the buccal cavity; they occur in one or more small oval patches, or these may become confluent. The first appearance of the white patch is preceded by hyperæmia, and in the early stages a hyperæmic areola is found about its borders; the patch becomes more or less thickened, sometimes to the extent of six to eight mm.; the epithelium, which has become hard and dry, may be easily removed or may exfoliate, leaving the appearance of an ulcer. The surface of the patch is marked by numerous fine lines or furrows, which intersect each other, dividing it into small polygonal spaces. Some of these may extend as deep fissures down through the thickened epithelium, and involve the mucosa in painful ulceration.

Under the microscope the epithelium is found greatly thickened, the papillæ enlarged and flattened, the blood vessels dilated, with an accumulation of leucocytes about their walls. The superficial layer of the mucous corium is infiltrated with embryonic cells, and the deep layer is involved in vascular alterations. Hielke says there is an hypertrophy of the epithelial and papillary layer of the mucous membrane, similar to the condition of skin termed ichthyosis. Among the causes of this affection may be mentioned excessive tobacco smoking. Mauriac and Vidal mention highly spiced foods and alcoholic stimulants. Schwimmer calls the affection idiopathic, but both he and Mauriac think there must be some peculiar predisposition toward it in order that it may be developed. Bazin believes that it is often the result of constitutional syphilis; it is also attributed to the arthritic or dartsious diathesis.

It is difficult to determine the duration of the disease; it has usually existed for months or years when the patient first presents himself; sometimes the affection will remain stationary for months, or under the effect of some irritant it may rapidly progress, and may again become dormant

if the irritant is removed. Some cases are early very sensitive; others may have existed for years without causing any pain.

There are no constitutional symptoms until epithelioma is developed.

In making the diagnosis leucoplakia is liable to be mistaken for what Guinaud has termed "professional patches" found in glass-blowers, for "smokers' patches," mercurial patches, psoriasis linguae, syphilitic patches, and epithelioma unconnected with leucoplakia. The "professional patches" occur only in old glass-blowers, and are symmetrical. Smokers' patches are more irregular, and commonly at the commissures of the lips.

The duration of the disease is uncertain. One authority mentions two cases in which cancer supervened in six months. Sir James Paget's cases terminated in cancer in eighteen months. Others have mentioned cases of thirty or forty years' duration.

Among the indications that leucoplakia is passing into epithelioma, are: non-inflammatory enlargement of the lymphatic glands, with exfoliation of the thicker portion of the patch, the formation of an ulcer, the supervention of sharp pain, salivation, and at length induration of the subjacent tissues.

In the treatment of this disease, all sources of irritation, particularly tobacco and alcoholic stimulants, should be at once removed; the digestive organs should receive proper attention. Aside from these measures, most authorities believe treatment of little or no avail; but from a study of the literature of the subject and from his own experience, Ingalls has arrived at the following conclusions:

1. Leucoplakia buccalis is an idiopathic disease, distinct from psoriasis, "smoker's patches," and syphilis. It is largely confined to men past middle life, but it occasionally occurs in women.
2. The disease is so commonly found in inveterate smokers, that the abuse of tobacco may fairly be considered as an exciting cause, though cases occur when tobacco has never been used.
3. The affection is chronic, and finally, in a majority of cases, terminates in epithelioma.
4. Internal treatment and the local application of sedative stimulants or caustic drugs are, in nearly all cases, either useless or injurious, and the latter are sometimes disastrous by hastening the development of epithelioma.
5. The actual cautery or the galvano-cautery will probably enable us to cure many cases if they are treated sufficiently early, provided it is ap-

plied to only a small spot at each sitting, and carefully so as not to destroy the healthy tissues beneath the changed epithelium.

Suicide by Bichloride Solution.

Prof. Joseph Marchlea (*Prager Medizinischer Wochenschrift*) reports the following cases where suicide was committed by a solution of bichloride of mercury:

Case 1. A woman drank a large amount of concentrated solution of the bichloride, and died after six hours.

Post-mortem.—Gastric mucous membrane hemorrhagic and necrotic; the vessels were filled with coagulated blood. The mucous membrane of the small intestine was suffused with blood, kidneys a brownish-red, and congested. At the base of the pyramids there were little extravasations. Liver hyperæmic.

Case 2. A young maiden who lived six days after taking a solution of the bichloride. Symptoms consisted of vomiting, bloody stools, and albumen in the urine, and four days in succession suppression of the urine. The post-mortem showed no fatty degeneration of the heart muscles, small fatty infiltration of the liver, and fatty degeneration of the epithelium of the urethra. The stomach, with the exception of ecchymoses of the size of a pin head, was normal. The mucous membrane of the colon was swollen from the rectum to the cæcum, dark brown-red, covered with numerous yellow-green eschars. These scabs were round, size of a bean, and the thickness of about one inch, and were distributed symmetrically, always three together, in rows in the long axis of the intestine. A few had been cast off and left ulcers behind them. On the mucous membrane of the small intestine, one could notice in the neighborhood of the cæcal valve scabs laid cross-wise and in single layers. Farther on, the mucous membrane appeared swollen and full of holes, but without eschar.

Case 3. A 25-year-old clerk took of the same solution that the girl had taken. He lived four days. The symptoms consisted in the beginning of frothy, bloody stools. These, however, disappeared, and the patient felt herself better. On the fourth day the patient sat up in bed, remained some minutes sitting, and fell back dead.

Post-mortem.—Stomach on exposed part looked brownish; internally a brownish-yellow. Fluid contents reacted neutral. Mucous membrane dark-brown, swollen, suffused with blood, deep eschar, and the epithelium removed. The mucous membrane of the small intestine was slightly

swollen, and without eschar. That of the colon in numerous places, especially in the transverse colon, extensively eschared, and in the manner of the eschars which were laid out so symmetrically in the long axis. These extended to the serous covering, but were in places, namely the sigmoid flexure, changed into ulcers. Spleen swollen, liver infiltrated with fat to a fair degree, kidneys extensively infiltrated with fat.

Marchlea concluded that this kind of eschar was found very often in poisoning from bichloride solution. This has been observed by Barthélemy, Taylor, Anderseck, Hamberger, and by Vidal. Marchlea believes that this condition occurs because this abnormal blood acts as an irritant on the mucous membrane.

Heredity of Phthisis.

Izaak Johannes Hage ("Akad. Proef. Schrift., Leyden, Holland, Schmidt's Jahrbucher, B. 200, No. 1, p. 110), under the title, "Sets over de Héredititeit der Phthisis," considers the following questions:

1. What is the connection between the hereditary phthisis and that otherwise acquired?
2. Has the father or the mother the greatest influence in developing hereditary phthisis?
3. Does phthisis descend more from father to son, and mother to daughter, or conversely?
4. At what period of life does hereditary phthisis make its first manifestations?
5. Is the factor of heredity greater or less in the country as compared with the city?
6. Is there a difference in regard to heredity in the sexes in the city or country?

After consulting the literature of all languages, and the reports of public and private institutions and leading authors in a manner too complete to consider here, the writer came to the following conclusions:

1. About three-fourths of the patients treated made satisfactory statements concerning their family history.
2. Somewhat less than half of the patients descend from phthisical parents.
3. The influence of the mother in the origin of hereditary phthisis is about four-fifths that of the father.
4. Hereditary phthisis descends mostly from father to daughter, but quite as often from father to son as from mother to son, and least of all from mother to daughter.
5. The first manifestations of the disease appear both in cases which are hereditary and in those

which are not hereditary twice as often before as after the thirtieth year.

6. With reference to time of life the endurance of the disease is greatest, there is no difference as to before or after the thirtieth year.

7. Heredity is as great in the country as in the city.

8. With men the heredity is greater in the city than in the country; with women the converse is true.

Toxic Enteritis due to Corrosive Sublimate.

The great germicidal power of corrosive sublimate has, of late, brought it prominently into notice in connection with antiseptic surgery. But we must remember that this drug is a most powerful poison, and we must handle it very gingerly. The *Weekly Med. Review* tells us that E. Fraenkel reports 14 cases of toxic enteritis that arose from corrosive sublimate treatment at the Hamburger Allgemeine Krankenhaus. The conclusions of his article, which is contained in *Virchow's Archiv*, are:

1. That corrosive sublimate is the most powerful of the antiseptics that can be practically employed; accidental wound-diseases rarely occur.

2. The employment of the sublimate, however, is dangerous, in this: that excessive external use is followed by diphtheritic inflammation of the large intestine, in a few cases even of the small intestine. This is manifested by tenesmus, colic, bloody diarrhoea. Definite alterations of the kidneys have not been observed.

3. The toxic enteritis referred to develops especially in patients that are run down, or excessively obese, having a poor heart action; especially if large surfaces are brought in contact with the sublimate-dressings, or surfaces of ready absorption, such as the peritoneum, the uterine cavity. Individual idiosyncrasies also may favor intoxication.

4. For these reasons corrosive sublimate is to be cautiously employed, and in the weakest solutions still possessing antiseptic virtues. The copious irrigation of wounds, and in especial of the puerperal uterus, with sublimate solutions, is a dangerous practice.

Causes of Sitophobia Among the Insane.

In the *American Journal of Insanity*, Dr. O. Everts says:

"Observant of everything, the hospital physician should be particularly sensitive to, and careful respecting, little things—things that are likely to be overlooked, or disregarded as 'little,'

by the insensitive, indifferent, ill-bred. And there are such—I grieve to say so—in this broad land of freedom and democracy; persons, for example—I have seen such prescribing for the sick—who would smile incredulously, or derisively, at the protest of a patient alleging inability to drink from a cup, or dip from a bucket, used in common by the patients of the hospital ward, or complaining of loss of appetite, and inability to eat, because of offensive odors, or the disgusting appearance or habits of table associates. I have known persons, also employed in hospitals in official positions, who could not comprehend the delicacy of feeling that would cause a person of refinement, even when insane, to shrink from bathing in company—two or more persons occupying the same tub and water, and using the same towel—notwithstanding the impatience of attendants required to bathe a certain number of persons within a given number of hours. But such persons, it is needless to say, are unfit for hospital service; and such 'little things' are too important to be pooh-poohed, or neglected, in the treatment of the insane. They are quite as important, indeed, to be known of, and attended to, as is the occasional necessity for, and skill in, the use of the stomach-tube for involuntary alimentation; or the voting qualification of appointees of political hospital boards."

Membranous Enteritis.

Such cases as the following, which Dr. Da Costa reports in the *College and Clinical Record*, happen sufficiently frequently to warrant a reproduction, which will prove no doubt of real service:

Married woman; æt. 29; no children. In poor health for four years. Had an attack of pleurisy during these years, and since has complained of a pain in her side. Has lost twenty pounds in three years. Until a few months ago she menstruated too freely, but now she is quite regular. Her appetite is good, but she 'swells' after eating. Does not digest; is constipated; pain at lower part of the stomach, and radiating to her back. It is not a constant pain. Generally an intermission of a week or more occurs between the attacks of pain. At this time her stools were very hard, with tenesmus. Is nervous and melancholy at times; emotional. Uses injections for her constipation.

When she has pain of two or three weeks' duration, she passes a formation which is accompanied at times by blood. This membrane comes in bands. She is more nervous and constipated when she passes these shreds. Tenderness over

descending and transverse colon. General soreness over lower part of abdomen. Tongue flabby—here and there fissured. In some attacks she has had vomiting, but this is not the rule. Her heart is normal; also lungs.

Diagnosis.—Membranous enteritis.

Treatment.—Difficult of cure. Give, every night, a piece of confection of senna, for pain.

R. Tinct. bellad., gtt. iij.

Tinct. cinchon. comp., f. 3j. M.

Sig.—Ter die."

Night Cough in Children.

Physicians are often consulted by anxious mothers on account of a peculiar cough attacking children. This cough only makes its appearance during night. The most careful examination fails to reveal any bronchial trouble or any lung complaint. The usual remedies are without result, and an elongated uvula can neither be made responsible for the annoying symptom.

Dr. McCoy has recently investigated this complaint and comes to the conclusion that it is caused by an affection of the mucous membrane of the nose. These catarrhal conditions always get worse towards night; the secretions accumulate in the nose, and finally find their way down and backwards, when they give rise to the irritation, which in its turn causes the cough. Careful syringing of the cavities of the nose with an alkaline solution is specially recommended.

Failure of Cocaine to Produce Anæsthesia.

That we may know all sides of every question, we note that Dr. Henry J. Garrigues (*N. Y. Med. Jour.*, Aug. 29), failed to secure anæsthesia after the most thorough, repeated, and prolonged applications of a four per cent. solution of hydrochlorate of cocaine. The price of the drug used was two dollars. He notes the fact that Ernst Fränkel, of Breslau (*Centralblatt für Gynäkologie*, December 6, 1884, vol. viii, p. 778), has likewise found the common solutions ineffective on the vagina, and recommends a twenty per cent. alcoholic solution; but, when we take into consideration the high price of the drug, so expensive a solution can only be used in exceptional cases. The patients, unless money be no object at all, will prefer to stand the pain or to be etherized.

A Treatment for Chronic Entero-Colitis.

The *College and Clinical Record* tells us that Dr. Wilson, in a case of chronic entero-colitis, suggested the following plan of treatment—the patient being four years old:

Rub over abdomen, which is greatly distended, 3ss. ol. morrhue, bis die. Before applying, the oil should be slightly heated.

Diet.—Expressed juice of meat and milk containing pancreatin.

A teaspoonful of whisky, in milk, twice daily, was advised, and of bismuth subnitrate, grains iij., four times daily.

Twice daily, a suppository, as follows, was ordered:

R. Pulv. opii., gr. ½.
Quinina bisulph., gr. ij. M.

CORRESPONDENCE.

Put Your Light in Front of the Horse.

EDITORS MED. AND SURG. REPORTER:

Few of the accessories to a country doctor's practice are so unsatisfactory as his means of lighting his way when driving at night. The various forms of dash lights are pretty much the same in that they put the light just where it is not wanted, illuminating the horses' tail and hips and the buggy thills with a brilliance quite unnecessary, which intensifies the blackness of the shadow cast by them just where one wishes most to see clearly.

A few nights ago I tried an experiment to overcome this difficulty, which proved such an abundant success that I hasten to give my brethren the benefit of the discovery.

My light is a common tubular lantern with a reflector and a spring for attachment to the dash. In place of putting it on the dash, I slipped the spring over the middle of the breast collar, directly in front of the horse. Every part of the road in front of me was plainly seen, so I could drive with as much confidence as in broad daylight. The conditions necessary for success are a level-headed horse, with fair breadth of chest and a shoulder strap attached to the check-hook, to prevent the lantern sagging down between the horse's legs when for any reason the traces slack. It would be well to have a short strap sewed to the inside of the breast collar to slip the spring through, so as to prevent any lateral motion.

WILLIAM B. ELY, M. D.

Penfield, N. Y., Sept. 4th, 1885.

Labor Complicated by a Firm Membrane.

EDS. MED. AND SURG. REPORTER:—

The evening of the 24th of March I was called to see Mrs. H., in the second stage of labor, in consultation with Dr. Jackson, of this city. On making an examination the finger came in contact with a dense, firm membrane, about one inch from the external opening, but I was not able to find an opening through the membrane until we made an ocular examination, and was unable then until a pain came on, which forced out a small stream of liquor amnii, not larger than a small-sized probe. The membrane was immediately incised, and the child was soon born. The patient said, after she found herself pregnant,

she consulted a homœopathic physician in this city in regard to the case. After making an examination, he informed her that as gestation advanced the membrane would be absorbed.

N. RONNELS BARNES, M. D.

154 Oak St., Binghamton, N. Y.

NEWS AND MISCELLANY.

What a State Board of Health Should Be.

For the edification of our Harrisburg legislators we quote the following from the annual message of the Governor of New Hampshire:

"I regard the State of Board Health as one of the most important and necessary of our State organizations. It should be heartily supported, and made as efficient as possible. Science has demonstrated that many of the diseases which are attributed by superstition and ignorance to supernatural influences are the results of natural causes, and may be avoided. The legislature, therefore, did a wise thing when it established a board to investigate the sanitary condition of our State, and to educate the people to a knowledge and observance of the laws of health. We needed to be told that physical evils are not always unavoidable dispensations of Providence, but are the results of causes which we often produce, and which we may generally prevent. We needed to be taught that the worst enemies of human health are generated in the filth that festers about many of our dwellings, throwing off poisonous miasms, and loading the air we breathe and impregnating the water we drink with the germs of disease and death; and we needed to be instructed how to preserve our health and prolong our lives by an earnest and unceasing warfare upon sickness-breeding impurities of all kinds. The primary object in establishing the board of health was undoubtedly to impart such information and instruction. In this the board has been actively engaged, and appears to have made good progress. But danger may come from abroad, and additional duties may devolve upon it. It is well known that Asiatic cholera has prevailed in many parts of Europe during the last year, and it is feared it may reach this country the present season. In case of its approach, the board should be charged with the duty of enforcing the most stringent sanitary regulations. If any additional legislation is necessary to enable it to do this promptly and effectually, it should be had at this session. The regular expenses of the board are fixed by statute, and I think will be sufficient for the ordinary wants of the year; but should it become necessary to resort to extreme measures, a further sum might be needed, and I suggest that a reasonable amount be placed in the hands of the Governor and Council, to be used if found necessary."

American Rhinological Association.

The following are the subjects of some of the papers (with the authors' names and addresses) to be read at the third meeting of the American Rhinological Association, to be held at Lexington, Ky., October 6, 1885:

"Address to the Association on Rhinology," by

the President, P. W. Logan, M. D., of Knoxville, Tenn.

"Chronic Otitis Media, Its Treatment in Connection with Nasal Disease," by Hiram Christopher, M. D., of St. Joseph, Mo.

"Self-Deception," by the same author.

"Hypertrophic Rhinitis; Its Sequels and Treatment," by J. A. Stucky, M. D., of Lexington, Kentucky.

"Treatment of Catarrh, Acute and Chronic," by A. DeVilbiss, M. D., of Toledo, Ohio.

"Treatment of the Naso-pharyngeal Cavity: a New Snare," by J. G. Carpenter, M. D., of Stanford, Ky.

"Aural Catarrh and Treatment by Different Methods, with the Theory of Each System," by Chas. A. S. Sims, M. D., of St. Joseph, Mo.

"Chronic Conjunctivitis Dependent upon Intra-Nasal Disease," by N. R. Gordon, M. D., of Springfield, Ill.

"Demonstrations (on the Cadaver) of the Nasal and Pharyngo-nasal Cavities, the Pharynx and Larynx. The Sections of the Cadaver will show all the Cavities, Canals, and Sinuses Connected with the Nasal and Pharyngo-nasal Cavities," by Thos. F. Rumbold, M. D., of St. Louis, Mo.

"Demonstrations of the Manner of Making Applications by Means of Spray Producers; the Age of the Patients being Respectively 1, 3, 8, 15, and 20 Years and Older," by the same author.

"Removal of Foreign Bodies and Tumors from the Upper Air Passages, with Demonstrations on a Phantom Head," by the same author.

"Treatment of Pruritic Rhinitis (Hay Fever) by Spray Producers Alone; Cases," by the same author.

"On the Treatment of Secondary and Tertiary Syphilis of the Larynx, Pharynx, and Mouth," by Jos. B. Payne, M. D., of Hot Springs, Ark.

"A Few Suggestions on Hypertrophy of the Turbinate Processes," by E. F. Henderson, M. D., of Los Angeles, Cal.

Seven other papers are promised, but the subjects have not yet been given to the Secretary.

The full programme will be ready to mail to any address on and after the 23d of September, on application to any of the above members, or Chas. A. S. Sims, M. D., Secretary, St. Joseph, Mo.

How Physicians are Treated in Spain.

Apròpos of the superstitious ignorance of the Spanish people that has caused them to antagonize the efforts of sanitarians in their behalf, and that has cost them already the lives of some 80,000 persons, we note the following from the *Moniteur Universelle*:

"At Puebla Larga, a suburb of Barcelona, a man died of cholera recently. The relatives of the deceased gave no notice of his death, but concealed the fact from their nearest neighbors. When the attendant physician made his morning call he found all of the family in an outer chamber, apparently as happy and jovial as usual. He was invited by one of them to step in and see the patient. He did so, and, on approaching the bedside and finding him dead, was about to retire, when he found himself surrounded by the relations, whose smiles were now turned into scowls and threatening visages. The head of the family

was the first to speak. Pointing to the dead man, he exclaimed: 'It is thus that you do the work we pay you for. You promised to save him—see the result.'

"The others chimed in, calling the doctor an assassin and a murderer, and one said: 'This is the third one you have slain in eight days, miserable assassin that you are!'

"While this was going on, the whole crowd had gathered close around the doctor, the men shaking their fists in his face and spitting upon him. Suddenly, with a cry, the wife of the dead man leaped upon the physician, while the others seized the remnants of the medicines which he had ordered for the patient, and commenced to force them down his throat. The doctor struggled, but was powerless against numbers, and was not released until every drop of the potions, the draughts, the clysters, every pill and powder had gone down his throat.

"For twenty minutes the unfortunate physician was thus held and tortured, and when he was finally released by his savage captors and allowed to depart, he was more dead than alive.

"In less than one hour from the moment of leaving the house, he was a corpse. The father of the victim, an old man and in poor health, took to his bed on the death of his son, and in two days he, too, was no more.

"The affair has created an intense feeling among the physicians, and the Medical Institute having been called together, is now considering what course shall be taken in order to protect physicians from the blind ignorance, fanaticism and fury of the populace in such cases."

Plants for Window Culture.

The *Popular Science News*, Feb., 1885, says: Many persons think a plant of no value unless it flowers. If amateurs could be content with an abundance of handsome foliage, with here and there a plant in flower, they would derive much more satisfaction from their attempts at window-gardening. With a view to aid those who would undertake window-gardening, we enumerate a few plants that will be quite sure to succeed. In the first place, as to plants cultivated for their foliage only. The most valuable of these is ivy. A plant of either English or Irish ivy, to be trained up over the window, is most pleasing; or ivy may be planted in a hanging-basket, to trail over the sides, and be twined up the handles. The *American Agriculturist* says that, for plants of this kind in pots, the india-rubber plant (*Ficus elastica*) is one of the best. Its leaves are large and vigorous, while the reddish sheaths to the young leaves are almost as handsome as flowers. The umbrella sedge, *Cyperus alternifolius*, looks something like a miniature palm, is easily cultivated, and very showy. The universal window-plant of Paris is *Aspidistra lurida variegata*, which has no common name. Our florists supply it, and it is an excellent plant for the window. The plant known as Wandering Jew, Aaron's beard, and many other names, is *Saxifraga sarmentosa*. It throws off runners, which hang over the pot or basket in a graceful manner; and, though it sometimes blooms, the flowers are not showy, and its chief beauty is its variegated leaves. Among

the plants to flower in the window we place first the Chinese primroses. If plants are to be procured from a florist, select those that do not yet show their flower-buds. They will flower for a long time. Some of the begonias, such as *B. fuschoides* and *B. multiflora*, are free-flowering and of easy culture. The so-called crab's-claw cactus (*Epiphyllum*) is an excellent window-plant, as are *Sedum Seiboldii*, the cigar-plant (*Cuphea*), and cyclamens.

Flatulent Colic in Horses.

The *American Agriculturist* for July says that when Prof. Gamgee was in this country, he said to the writer that more horses died of colic than of any other malady, and he suggested a remedy which has been published in the *American Agriculturist*, and been found efficacious, we doubt not, by thousands of horse owners. The remedy, simply stated, is copious injections of cold or tepid water—that is, cold but not too cold. Water that has the temperature of the air in the summer time is right—say seventy to ninety degrees. The best way to apply it is to use a large funnel, holding about two quarts, to which a rubber tube, three feet long, is attached, and this is terminated by a tin nozzle about fourteen inches long, tapering to a quarter-inch opening. This end should be protected by a lump of solder, so as to prevent injury to the parts. The funnel is filled with water at the level of the horse's rump, and then lifted up as high as possible. Four to six quarts will usually be sufficient to start the wind; then stand clear. Relief follows at once.

There are many causes of colic, as a sudden change of food, hard work or active exercise after feeding, very rapid eating (as after long fasting and hard work), the chill experienced when exposed to too rapid cooling off after sweating—these are some of the common causes, and are conditions to be avoided at any rate. Care will almost always prevent colic, and the above simple remedy will generally cure it; we have never known it to fail.

Professor Huxley on Smoking.

At a certain debate on smoking among the members of the British Association, Professor Huxley told the story of his struggles in a way which utterly put the anti-tobaccoists to confusion. "For forty years of my life," he said, "tobacco had been a deadly poison to me. [Loud cheers from the anti-tobaccoists.] In my youth, as a medical student, I tried to smoke. In vain! At every fresh attempt my insidious foe stretched me prostrate on the floor. [Repeated cheers.] I entered the navy. Again I tried to smoke, and again met with a defeat. I hated tobacco. I could almost have lent my support to any institution that had for its object the putting of tobacco smokers to death. [Vociferous cheering.] A few years ago I was in Brittany with some friends; we went to an inn; they began to smoke and looked very happy, and outside it was very wet and dismal. I thought I would try a cigar. [Murmurs.] I did so. [Great expectations.] I smoked that cigar—it was delicious! [Groans.] From that moment I was a changed man, and I now feel that smoking in moderation is a comfort-

able and laudable practice, and is productive of good. [Dismay and confusion of the anti-tobaccoists. Roars of laughter from the smokers.] There is no more harm in a pipe than there is in a cup of tea. You may poison yourself by drinking too much green tea, and kill yourself by eating too many beefsteaks. For my own part, I consider that tobacco, in moderation, is a sweetener and equalizer of the temper." [Total rout of the anti-tobaccoists, and complete triumph of the smokers.]

Moral Insanity as an Excuse for Crime.

From the *Journal of Nervous and Mental Diseases* we learn that the Supreme Court of Pennsylvania (*American Law Register*, March, 1885,) not only affirms the existence of moral insanity, but admits that it may, under certain circumstances, constitute a defense for crime. It says: "Moral insanity is not sufficient to constitute a defense, unless it be shown that the propensities in question exist to such an extent as to subjugate the intellect, control the will, and render it impossible to do otherwise than to yield thereto. No mere moral obliquity of perception will protect a person from punishment for his deliberate act. The jury should be satisfied with reference to the act in question that his own reason, conscience, and judgment, were so entirely perverted as to render the commission thereof a duty of overwhelming importance. While a slight departure from a well-balanced mind may be pronounced insanity in medical science, yet such a rule cannot be recognized in the administration of law when a person is on trial for the commission of a high crime. The just and necessary protection of society requires the recognition of a rule which demands a greater degree of insanity to exempt from punishment." This decision rests the issue of responsibility not upon knowledge, but upon power.

A Curious Collection of Skeletons.

From *Lyon Medicafe* we learn that the celebrated doctor-naturalist Daubenton, who, in 1745, was nominated at the recommendation of Buffon, one of the curators of the *Muséum d'Histoire Naturelle*, busied himself in forming collections of all kinds. Among these was a very curious, but also a very repulsive one. It was only known to have existed, but had disappeared and never could be found. Some days ago, however, one of the *Muséum* assistants, in rummaging about in a loft, discovered, to his great astonishment, a number of skeletons of most extraordinary forms. He made known his find to the directors, MM. Fremy and Quartefages, and after an examination these *savants* came to the conclusion that this was really the famous collection of Daubenton, which had been sought for for nearly 80 years. The collection was made up of the skeletons of the inhabitants of the *Cour des Miracles* (since rendered so famous by Victor Hugo in his *Notre Dame de Paris*). For more than 40 years Daubenton, who lived until he was 84, made every effort to secure the remains of all the deformed and mutilated beings of all sorts who inhabited this locality; and a most singular collection has been the result.

A Fertile Woman.

The *Lyon Medical* (July 12) cites the case of a peasant woman, who, at all events, has done her part in the endeavor to repair the deficiency of population of which the French statisticians are so bitterly complaining. She has brought forth twenty-seven children, of whom twenty-five are alive and in good health, only six being girls. In one year five made their appearance, three on the 2d of January and two on 27th of December. She is now sixty-eight years of age and her husband is seventy-three, and both continue their agricultural employment, assisted by six sons. All these children have received a good education, and three of the sons are in the army at Tonquin, two of them have attained high distinction. Two of the three married daughters seem disposed to follow in their mother's footsteps, one of them, thirty-four years of age, having had nine children and the other five, two of whom are twins.

Errata.

THE DOSE OF PARALDEHYD.

EDS. MED. AND SURG. REPORTER:—

I see in your "Book Notices" a slight mistake as to "Paraldehyd as a Germicide." It should read, paraldehyd 3j. instead of 3j. Rest of formula correct. It is so in our report of State Medical Society, but it is not correct. Will you please call attention to the mistake.

C. C. HERSMAN, M. D.

Items.

—Dr. Frank B. Gallery, one of the prominent physicians of Rochester, died on August 29th, from the effects of an operation recently performed on him. He was incapacitated from professional duty some time ago, and removed to the town of Greece, where he died. He was thirty-eight years of age.

—Prof. J. von Mering, of Strassburg, states (*Central für die Med. Wiss.*) that, by giving phloridzin to dogs who have been fed on meat for a long time, an intensified secretion of sugar takes place in the urine without any change in the general health. He believes that light will be thrown on several facts connected with diabetes mellitus by his observations.

—A penetrating pistol-shot wound of the abdomen, successfully treated by laparotomy and suture of the intestines, is reported by Dr. John B. Hamilton, Supervising Surgeon General of the Marine Hospital Service, in the *Journal of the American Medical Association*. Eleven wounds requiring suture were found in the small intestine and two in the ascending colon.

—M. Paul Vigier recommends (*Gazette Hebdomadaire*, July 24, 1885,) what he terms a *sirop de dentition* to assuage the pain suffered by infants while cutting their teeth, especially the canines; hydrochlorate of cocaine, 10 centigrammes; simple syrup, 10 grammes; tincture of saffron, 10 drops. The painful gums should be gently rubbed with some of this several times a day.

—Dr. S. P. Hubbard, of Taunton, Mass., writes to the *Medical Record*: "As I have never seen in any medical journal the virtues of the swamp

button-bush (*cephalanthus occidentalis*), for poisons of all kinds, especially *rhus tox.*, I wish to say to the medical profession that no remedy half equals it. Try it. Make a strong tea and freely bathe the parts with it while hot."

—Nussbaum treats the small, soft warts which frequently cover the penis, by first washing them twice daily in salt water and afterward sprinkling with calomel. The reaction of the residual sodium chloride and mercurous chloride produces mercuric chloride, or corrosive sublimate. This treatment, he claims, cures the warts rapidly, without causing the least pain or detention from business.

—Dr. Cheize, in the *Glasgow Medical Journal* writes that, wishing to remove an ingrowing toe, nail, and being without a spray-producer, he covered the toe with a pledget the size of a crown-piece, poured ether on it, and evaporated this by means of a pair of bellows; in five minutes anesthesia was complete, and lasted while the nail was removed and the matrix seared with the actual cautery.

—A Belgian medical paper states that Dr. Schiffrers has communicated to the Liege Medical Society a case of papilloma of the larynx in an old man over 80 years of age, which had lately been occasioning the patient considerable inconvenience. The author was able to remove it completely in one sitting by means of Mackenzie's forceps. The tumor was as large as a bean, and was situated on the right inferior vocal cord.

—The following treatment of scabies is recommended by Dr. Comessati (*Pharmak. Zeit. and Jour. de Méd. de Paris*, 1885, No. 14) as being easy and certain in its action. A solution is prepared containing four ounces of hyposulphite of soda in one pint of water, and the whole body is washed with it in the evening. The next morning the skin is sponged with dilute hydrochloric acid (one ounce to the pint); sulphur, sulphurous acid, and chloride of sodium are formed, and the disease is, in most cases, cured by a single application.

—*Peck's Milwaukee Sun* makes a suggestion which might be of value to some enterprising patent medicine man. He proposes to medicate the mucilage which is used on the back of postage stamps, and by this means furnish the public, free of extra charge, a panacea for all their ills. He suggests that the back of the one-cent stamps might be utilized as a kidney and liver cure, the two-cent stamps as a universal tonic, the five-cent ones for coughs and colds, etc.

—It has been proposed to establish a temperance hospital in Melbourne, in which patients may be treated "without the use of alcohol except as a drug." The *Australasian Medical Gazette* in editorial comments on the proposed hospital, expresses the opinion that all patients are in a better position to be cured when under the care of practitioners having no strongly marked prejudices either for or against alcohol, than in a hospital the very principle of whose existence is a prejudice of its officers against a valuable, though often abused means of cure.

—Dr. W. Noschel has made some observations on the action of hot drinks and hot food on the stomach, and finds that hot tea given after dinner

in quantities not exceeding three beer-glasses full had no effect on the digestion; but when given in still larger quantities, it usually retarded the process. He could not detect any special effect from the use of hot or cold solid food. When the stomach-sound was used, he found that it could be introduced with great facility after applying a five per cent. solution of cocaine to the pharynx with a brush.

—*Gaillard's Medical Journal* reports that at Branchville, S. C., on June 5 a large number of persons, three of whom died, were poisoned by eating wild honey. Shortly after taking it they all complained of blindness and dizziness, and the honey was found, on examination, to be strongly impregnated with gelsemium. But for prompt and energetic medical assistance, it is said there would have been twenty deaths, instead of three. A few days before there occurred two deaths in the neighborhood which could not be satisfactorily accounted for, but which are now believed to have been undoubtedly due to the same cause.

—Dr. Detmers, of Champaign, Ill., at a meeting of the National Society of Microscopists at Cleveland, drew pictures of the formidable appearing bacteria found in samples of dried beef that had killed several families in Moline, Ill., and expressed the opinion that the beef was of cattle that had been killed while in a state of frenzy. Venison of deer tortured by dogs has been known to kill persons. Dr. Detmers has examined hundreds of cattle slaughtered in Chicago, and says that while lumpy-jawed, and even pleuro-pneumonia-affected beef is harmless when eaten, cattle killed while in a frenzied state may prove poisonous meat.

—The Grecian government has become alarmed at the increase in malarial fevers among the inhabitants of that country, which investigation has shown to be in a measure due to the poor quality and high price of quinine. It has therefore removed the duty from this drug, a measure which has already led to a reduction in its price, and has further determined to withdraw its sale from private hands and confine it entirely to government stores. It will buy only from the best and most reliable makers, and sell at a very slight advance above the manufacturers' price, sufficient to defray the cost of transportation.

—Dr. W. T. Smith, of Hanover, N. H., writes to the *Medical Record* that he recently used cocaine in extracting a great toe-nail, with results that seem worthy of record in view of the ordinarily painful nature of this operation. He made four injections about the nail, and then ran his needle under the centre of it. In a few minutes he thrust the blade of his scissors along the track of the needle and split the nail to its base and removed it with the forceps. The patient watched the operation, and said that it was absolutely painless. He used a four per cent. solution, and judged that fifteen or twenty minims were absorbed.

MARRIAGE.

BEVES-NEWBY.—September 16, 1885, at the Catholic Apostolic church, by the Rev. D. M. Fackler, Arthur Spencer Beves, of London, England, to Alice Bradford, daughter of George Newby, M. D., of New York city.